TORONTO, DECEMBER, 1940

THE CANADIAN HOSPITAL

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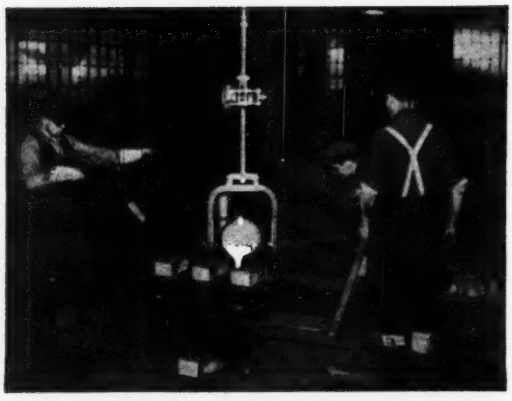

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Harvey Agnew, M.D.,
Editor

The CANADIAN HOSPITAL

Toronto, December, 1940 Vol. 17 No. 12

A Proposed Method of Making Municipal Payments Equitable to all Hospitals

A Manitoba Committee Tackles a Major Problem

IN an endeavour to work out a solution for this problem which would assist the higher cost hospitals, now grossly underpaid for indigent service, and at the same time not raise the *basic* rate of payment by the municipalities, the Manitoba Hospital Association appointed a committee under the chairmanship of J. Milton George, K.C., of Deloraine to survey the cost situation in large and small hospitals and make recommendations to the recent convention in Portage la Prairie. The following has been excerpted from this report:

According to the last annual report of the 42 public hospitals operating in the province:

(a) 25 report a total deficit of $469,158.

(b) 17 report a total profit of $21,513 without taking account in some cases of loss from uncollectable accounts, which would greatly reduce the profits reported.

(c) 7 of the hospitals reporting profits have operated at an actual loss, but have overcome their loss by special donations and endowments.

(d) From 1934 to 1938 public ward patients increased 19 per cent, private ward patients increased 16 per cent, with an increase of population of only 1 per cent.

(e) These hospitals represent an annual expenditure, based on latest figures available, of $3,025,945, of which $1,175,541 or 45.4 per cent is salaries. Supplies amount to 35 per cent of the total expenditure.

(f) 97 out of every 1000 of the province's population are receiving hospital treatment.

Full details of operation have been furnished to the committee by 25 hospitals, 8 metropolitan and 17 rural, and these are representative of all the hospitals in the province. These detailed figures, which are available on request, reveal the following facts:

1. The average cost per patient per day in:
   (a) Metropolitan hospitals is $3.27
   (b) Rural hospitals 2.51
   (c) All hospitals 3.14
2. The average annual cash salaries of all employees living in at the
   (a) Metropolitan hospitals is $436.66
   (b) Rural hospitals 376.19
   (c) All hospitals 429.47

3. The "City Hospitals", that is those in Winnipeg, St. Boniface and Brandon, furnish special services designated as "extras", such as x-ray, pathological, serological and bacteriological laboratories, biochemical laboratory, cardiograms, basal metabolic readings, physical therapy, heat, light and electrical treatments, operating room services, special medications such as sera and expensive

Hospital care costs more in most highly equipped urban hospitals with their staffs of professional and technical experts than it does in the average rural hospital. How can municipal payments for the care of indigents be amended so that these payments may be fair to both large and small hospitals and to the municipalities? Manitoba may have the answer.

drugs, special splints and appliances.

4. These "extra" services are equal to 83 cents for each public patient day's treatment and represent practically the difference in per diem costs between metropolitan and rural hospitals as shown above.

5. The annual cost of special services in Winnipeg and St. Boniface hospitals (exclusive of the provincial hospitals) is $350,338 according to 1938 figures, or a cost of $9.60 per patient for 36,486 patients treated.

6. After crediting earnings, profits and donations from the previously mentioned figure of 83 cents, the loss to city hospitals forunpaid special services is 21 cents per patient public day.

7. Most of the extras above referred to have been developed since the municipal rate was dropped from $1.75 to $1.50 per day and the government grant from 50 cents to 40 cents per day.

8. The maintenance of the city hospitals with their services unimpaired is of vital interest to rural and suburban Manitoba for the city hospitals furnish 70 per cent of the hospital service to the province (excluding sanatorium and mental hospitals). This means that out of a population of over 700,000 in the province, the city hospitals not only make provision for hospital care for the quarter million of their own residents but also maintain hospital facilities for half of the population of rural and urban Manitoba as well.

9. The demand for specialized or "extra" services is ever on the increase and evidence secured from the Medical Association proves that some of the new methods of treating some diseases have resulted in greatly diminishing the period of hospitalization.

10. Cost of extra services is rapidly increasing as a result of increased cost of equipment and supplies due to the war.

Recommendations

1. That the high standard of efficiency in hospitals of the province be maintained, and further development of specialized services be encouraged for the benefit of mankind.

2. That hospital services are even more important in time of war than in time of peace, and that there should be no reduction in hospital service due to increased financial burdens of war.

J. Milton George, K.C.
Deloraine, Man.

3. That hospitals are now being operated as economically as possible and no further reduction in cost of operation is possible without seriously affecting service and efficiency.

4. That to continue the present hospital services and to meet the ever increasing cost and demand for service, some further financial assistance must be given.

5. *That from the facts secured it is quite evident that most of the loss in hospital operation is due to the "extra" services rendered free to the public ward patients, and that this loss can only be overcome by increased government or municipal grants, or both, to all hospitals providing "extras" on the basis of actual cost of such services.*

6. As a result of the conference with the executive of the Union of Municipalities, the Minister of Health and Public Welfare and the Manitoba Medical Association, and, so far as could be learned, from the representations made at the district meetings of the Union, it seemed to be agreed that the best and most fair way to deal with the situation would be, *a system of providing for payment to hospitals for actual service rendered,* and in order to do so, to recommend that statutory provisions be made to permit hospitals to charge for such services on a basis to be decided upon by agreement between the executives of the Union of Municipalities and the Hospital Association. Details of the proposals are to be submitted for approval at the convention of the Union of Municipalities this year.

Faith!

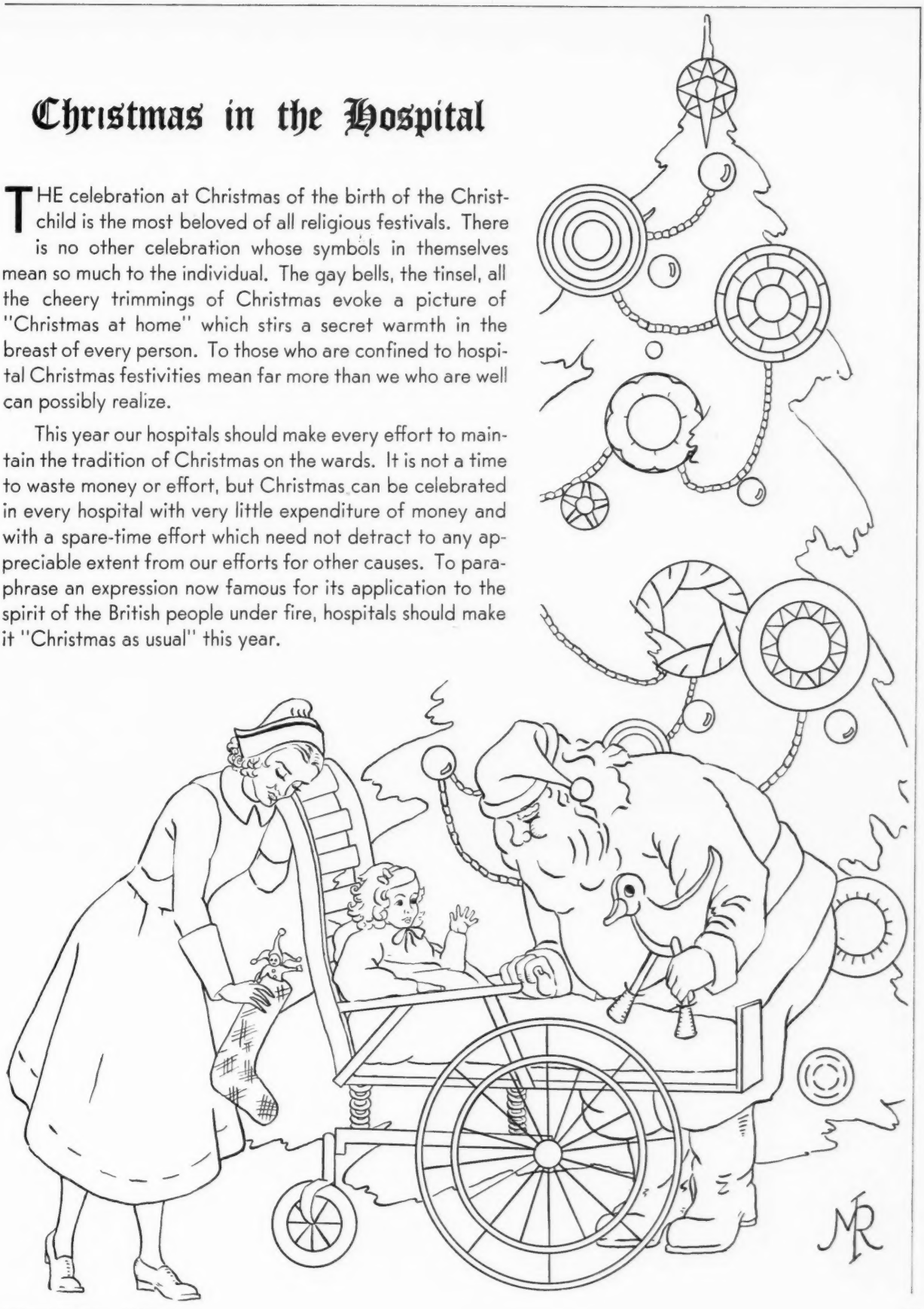
Faith, in the world to-day, is becoming a rare commodity. That a man should have faith in his neighbours is the chief pillar of a peaceful society, but to-day there is no peace, and faith seems to have become at once the jest of cynics and the curse of its possessors. Perhaps human thought has directed itself too much toward the mass, the cosmos, and turned too far from the conception of the individual conscience, and the supreme importance of the individual spirit. If that is true, and if we are to pass through a cultural age in which the individual mind is to become a unit cell of the mass mind, so that faith between two individuals loses its heroic quality—even so there will still remain all sorts of isolated survivals of individual faith to become the seeds from which the power of faith among men can be reborn. The faith of a patient in his doctor is of such a sort. It would therefore, seem to be a peculiarly important time for men in the medical profession to realize that in pursuing the lofty ideals of their profession, without cynicism, without corruption, without rancour against the hardships which may befall them, they will be playing more than a small part in creating a new world of faith and peace.

From an address by Barklie Henry, President, Board of Governors, New York Hospital, at Commencement Exercises of Cornell University Medical College.

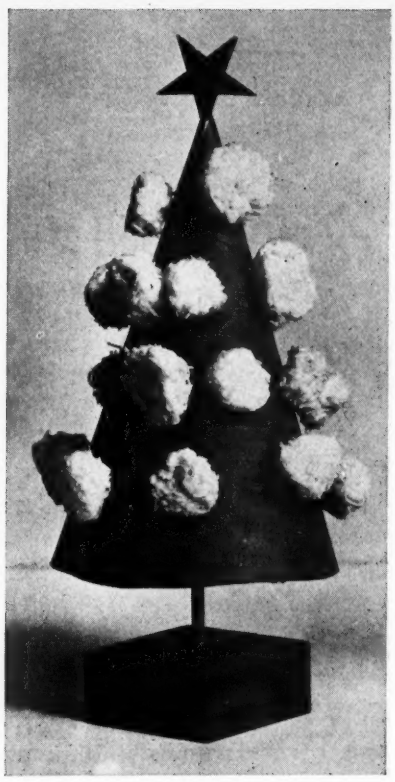
Christmas in the Hospital

THE celebration at Christmas of the birth of the Christchild is the most beloved of all religious festivals. There is no other celebration whose symbols in themselves mean so much to the individual. The gay bells, the tinsel, all the cheery trimmings of Christmas evoke a picture of "Christmas at home" which stirs a secret warmth in the breast of every person. To those who are confined to hospital Christmas festivities mean far more than we who are well can possibly realize.

This year our hospitals should make every effort to maintain the tradition of Christmas on the wards. It is not a time to waste money or effort, but Christmas can be celebrated in every hospital with very little expenditure of money and with a spare-time effort which need not detract to any appreciable extent from our efforts for other causes. To paraphrase an expression now famous for its application to the spirit of the British people under fire, hospitals should make it "Christmas as usual" this year.



The Pudding's steaming in the pot,
The Goose is turning on the spit,
And on each face and in each heart
The joy of Christmastide is writ.



A HAPPY CHRISTMAS for the PATIENT

The Dietitian Does Her Bit

By FLORENCE W. STACEY, M.A., B.Sc.
Dietetics Editor

CHRISTMAS comes but once a year to the hospital dietary department and it is then that the dietitian comes truly into her own. Ye olde fashioned Christmas dinner and all the fixin's must be skilfully planned and prepared, that with all its delights, it may be a contribution, par excellence, to the happiness of her large hospital "family" on that Day of Days!

The meal tray is an event to the patient on any day. On Christmas it becomes a festive occasion. Each meal of that day may present to him a whole galaxy of surprises—unusual menus, gay decorations, jaunty favours. Christmas in hospital can be a happy time, as it brings, even there, laughter and light, as it lends surety to the hope for "Peace on Earth—Goodwill towards Men".

Long before the day, great plans must be made. What variations from the traditional menu can be made? What are the favours and decorations to be this year?

Suggestions, are, indeed, in order. Following is one dinner menu for the private patient tray:

DINNER
Celery Olives
Consomme
Roast Turkey
Dressing Giblet Gravy
Cranberry Sauce
Whipped Potatoes
Buttered Squash French Peas
Star Salad
Yuletide Ice Cream Roll
Almonds Raisins Shortbread

The supper must be carefully thought out, for it comes at the end of an exciting day which has been marked by much eating and merry-making, even for the bed-patient.

Here is one suggestion:

SUPPER
Oyster Broth
Tomato Jelly Salad Cheese Fingers
Individual Plum Pudding
Hard Sauce or Brandy Sauce

Another combination for the festive day might be:

DINNER
Bouquet Cocktail
Bouillon
Roast Turkey
Dressing Cranberry Jelly Gravy
Duchess Potatoes
Fluffy Turnips Green Asparagus
Celery Hearts Olives
Mincemeat Tarts

SUPPER
Cream of Mushroom Soup
Fruit Salad Tea Biscuits
Christmas Ice Cream
Bon-Bons Fruit Cake Nuts

Favours

What of the favours, which add so much to the attractiveness of the tray? In this busy work-a-day world the dietitian welcomes new ideas. Have you tried these?

1. Meet Mr. Hard-Sauce Snowman. He is a fascinating creature and does add jollity to those individual Plum Puddings. Use the regular hard sauce recipe, adding enough extra sugar to give a stiff mixture. His body and head are little balls of hard sauce. His height is about three inches. For his eyes and nose and buttons, use cloves. A licorice drop becomes the derby hat. He should be made long before dinner and should be kept in the refrigerator until the rounds of pudding are sliced off for each serving. (Fig. 1.)

And speaking of the pudding, a simple rosette of hard sauce may be dropped from a pastry tube on the top rounded surface of an individual pudding. The latter takes on dignity and grace when taken in to the patient at the end of the meal, piping hot, with the twinkling flame from a wee red candle lighting its way from the top of the rosette.

2. What about those *bon-bon containers?* For ease in preparation, economy and genuine colourfulness, you can't beat the cellophane cornucopia. Bought in large sheets of red

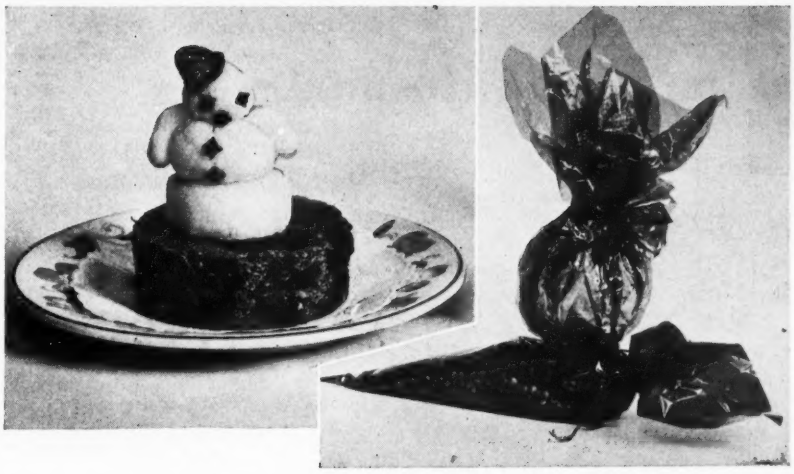


Fig. 1. The Hard-Sauce Snowman has a chunky dignity which is offset by the rakish tilt of his gumdrop hat.
Fig. 2. The cellophane cornucopia makes a gay bon-bon container and is both easy to make and economical.

and green, the cellophane paper may be cut in eleven inch squares. These squares are deftly twisted in shape, held fast with gummed cellophane tape. Filled with candies, they are tied at the top with red or green tinsel ribbon. (Fig. 2.)

3. Another simply prepared *nut-cup* is made using a small paper souffle cup. Partially filled with nuts, a tiny colored candy cane is made to stand upright in the centre of the cup. Then a square of cellophane paper is gathered around the cup, up and around the cane and tied in place with coloured ribbon, leaving the crook of the cane projecting pertly from the frill above. (Fig. 3.)

4. Have you tried the bright *popcorn ball* wrapped in red and green cellophane? For the children, rice crispie balls dotted with candied cherries are a satisfying alternative.

5. An effective *centrepiece* for the Children's table is this hand-made Christmas tree. Wooden blocks made to any size in the hospital carpentry shop and painted red or green, form the base. A meat skewer is the upright trunk. To make the tree, cut circles eighteen inches in diameter from red or green blotting paper and then cut each circle in half. Overlap the edges of each half circle so that it takes the shape of a cone. Then glue the cut edges. The decorative balls on the tree may be marshmallows coated with cocoanut, with toothpick branches. (See illustration at top of first page.)

6. What's this realistic *candle-holder*? Can it be—why it is nothing but a rosy apple, carefully scooped out to hold a fat candle! Smart, we think!

7. Then there are the *place-cards*. Here is a group, made by hand just with scissors, stickers, stiff paper, ink, dexterity and patience. We recommend them. (Fig. 4.)

And so, with one eye on the Soup and one on the Sauce, the wish goes out *"Merry Christmas Every One!"*

An Ode to the Smith Petersen Pin

A great aunt of mine
Of age sixty-nine,
Admittedly rather a dreamer,
One day in her flat
Fell over the cat
And fractured the neck of her femur.
Dr. Whitman was called
Who at once was appalled
And made ready to put on a cast.
Although a relation, a new consultation
I requested without being asked.
It was held the next day and on the x-ray
The bone was in fair apposition,
So they seized the old dame,
Strapped her on a hard frame,
As they did the French inquisition.

Fortunately for the "old dame," it was decided at this stage to use the Smith Petersen pin, with the result that:

In short, she got well and I shudder to tell
Any facts that are not strictly true;
She's amazingly supple and one of a couple
Of tap dancers in a revue.
If you're one of the number
Who, dancing the rhumba
Or after a surfeit of gin
Fall, like my relation, without hesitation
Demand a Smith Petersen pin.

From an article in "The Ontario Radiographer" by E. R. Coon, M.O.S.R., Ottawa Civic Hospital.

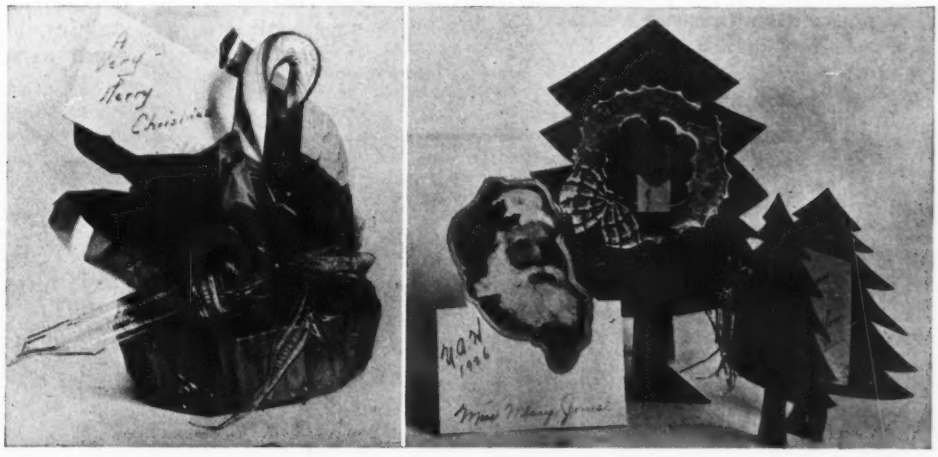


Fig. 3. The good old-fashioned candy-cane helps to make this cellophane covered souffle cup into an intriguing nut or candy cup.

Fig. 4. These place cards are effective and very easy to make.

Two Conceptions of the Role of the Ward Aid.

The Ward Aid in the Small Hospital

JESSIE KERR, R.N. and
MRS. CLARA J. JONES, R.N.

I

By Jessie Kerr, R.N.,
Vita, Manitoba

THIS young woman had grown up on a farm and at an early age had assumed responsibility, but had not had the opportunity of higher education. She had cared for sick folks among her own friends, had spent considerable time in a small nursing home, and had worked as a domestic in several homes and, latterly, in a Winnipeg home where it was felt very strongly that an opportunity should be given her to fit herself further for service in "the care of the sick."

You may ask how we started her off. I took her under my personal supervision at once, talked with her about the life she was entering and the place she would fill as a ward aid. I spent several days with her, teaching and demonstrating. To avoid confusion, I did the teaching myself, and she came to me for help until she had confidence in herself. I put into her hands quite early lectures on practical nursing and other subjects, which would be of benefit to her--for instance, obstetrics—and we all tried to help her understand her new surroundings. I found her very capable, very anxious to learn and to please, and the patients liked her very much.

She now does bedside nursing, applies mustard plasters, poultices, gives inhalations, gives enemata, gives post-partum care, takes temperatures, gives simple medicines under supervision, can do simple dressings, can administer a hypodermic, can set up a catheterization tray, does up supplies for sterilization (we are going to teach her to run the sterilizer), will help with cleaning anywhere when necessary, will go into the kitchen and help there in the busy season at canning, preserving, or curing of meat, and will go into the laundry and help to iron or fold linen. She does not do operating room work, although we have taken her to the O.R. to observe. She is never responsible for a maternity case, although she stays with them during the first stage and has seen many deliveries. She does not prepare hypodermics (but can administer them); she does not take care of isolation cases (but is capable of doing so). She realizes that the fact that there are things she is not permitted to do does not minimize her worth, but is her protection, as it is that of the patient and the hospital. She also knows that every nurse is responsible for her while on duty with her.

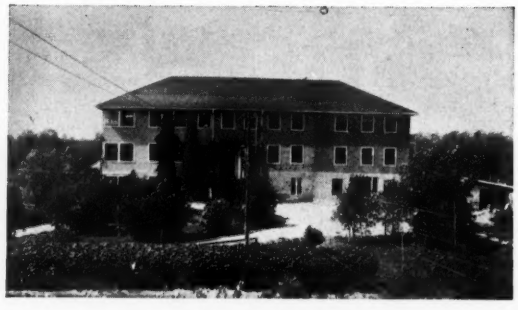
What has the hospital given her in return? In the year and a half she has gained a knowledge of the care of bed patients, surgical, medical and obstetrical, has been on trips to the country with the doctor, and can confidently perform any of the duties I have related. She has gained some knowledge of materia medica and of some other subjects from notes.

The woman who can come into a small hospital and can demonstrate and prove that she is a dependable ward aid is not just an ordinary person. We feel that the selection of the individual is particularly necessary. There are certain qualifications which she must have; a woman who has lived in the country in early life will naturally understand the problems of a rural community, which surround the average small hospital, much better than a girl who has never known country life. She should not be just a young girl; knowledge of life and people is very essential. She should know how to assume responsibility; her record of past service is very valuable in making a selection. She should have a real desire to gain nursing experience and be capable of adapting herself to her surroundings.

Where does she fit in socially? Our ward aid has long since become one of us. We have tried to guard against our hospital becoming too much institutionalized and have aimed at a handpicked staff who would make for a congenial happy group. There is not much caste, and doctors, nurses and maids work together and play together very harmoniously. Our hospital is situated in a non-Anglo-Saxon community where there is little social life apart from our group.

Our experiment has been so successful that we have seriously considered taking on another ward aid, knowing of course that careful selection must again be made and that the arrangement of the work be such that a graduate nurse would always be on duty with a ward aid.

We are persuaded that the ward aid has a very definite and worthy place in the small hospital. She cannot take the place of the graduate nurse, but is complementary to her. The fine points of nursing she cannot know, such as the recognition of symptoms or the gravity of certain conditions. These come only with study and careful observation of longer training, but the ward aid can do much to assist the nurse and the



Vita General Hospital, Vita, Manitoba.

Miss Jessie Kerr, a graduate of Winnipeg General Hospital, is a trained social worker as well, having had considerable experience in Winnipeg, and brings to the problem the background of this dual experience. Presented at the Manitoba Hospital Association Convention, Portage la Prairie, October, 1940.

financial saving is also a very considerable factor.

II

By Mrs. Clara J. Jones, R.N.
Dauphin, Manitoba

What Are Subsidiary Workers?

Webster defines them as "Auxiliary workers—helpers—those who aid." We use the term "Aids," or "Ward Aids."

You may ask, Why are we considering, yes, even advocating, this group of workers?

(1) To reduce the student enrolment.
(2) To relieve the student and graduate from non-nursing duties, thus permitting her to confine her efforts to skilled nursing.
(3) Economically their use is sound, as they can be obtained at a lesser salary than the registered nurse.

Selecting the "Ward Aid"

We prefer young ladies from eighteen to twenty-five years of age who have had from one to two years of high school training. A personal application is deemed advisable; often a two-minute interview will convey more than a dozen recommendations. Honesty is paramount; they must be teachable, adaptable, and possess a pleasing personality and emotional stability.

Result: Changing Personnel

However, with these attributes the personnel of my staff has been given to frequent change. The combination of a clear balmy breeze and a dashing swain mean that a resignation is soon placed on file.

Then a couple of weeks pass and Miss Ward Aid No. 2 appears at the office door crying:

"Mrs. Jones, m-m-may I speak to you now, p-p-please?"

"Why! come in; do explain whatever is wrong?"

"I came to tell you I want to resign; I can't work here very long—I-I'm going to be m-m-married."

At this stage I am almost certain that the Sairey Gamp type had its advantage as well as its disadvantage.

Instruction

The ward aids are admitted to the class room and receive instruction from the instructress in general cleaning—cleaning and caring of rubber goods—making of beds, both the open and closed types, also the anaesthetic bed, which is especially prepared for the patient on return from the operating room and the checking of patients' clothes when admitted or discharged. They are taught the setting up and carrying of trays, also the feeding of children and of aged patients, the proper care of flowers, the putting away of linen, the escorting of visitors to and from the wards; they also act as messengers from one department to another. This may sound like many duties but, tracing back, you will find that only once have they actually contacted the patient.

Dauphin General Hospital, Dauphin, Manitoba.

The Admittance Procedure

Let us suppose a patient with, say, an infected arm has just walked into the office; we shall journey with him along *Admittance Lane*. When the office clerk has completed the necessary admittance form, she phones the charge nurse on the flat who in turn delegates Miss "Ward Aid" to go to the main office and escort the patient to the medical floor.

While the nurse is recording the temperature, pulse, etc., we notice Miss Ward Aid preparing the bath. She finds the patient a gown, slippers, towels, etc. As he is quite capable of bathing himself, Miss Ward Aid moves quickly on to prepare his room and bed. With a few minutes at her disposal, she gathers all the necessary articles together to carry out the initial treatment prescribed. With the patient now comfortably settled in his room, his clothes must be listed and valuables checked in the presence of the charge nurse who, in turn, places them in safe keeping. Miss Ward Aid now has time to clean the recently used bathroom before notifying the kitchen to send up the diet tray for tea.

When it comes to discharging a patient we retrace our steps systematically back along Admittance Lane. Statistics show that 37% of the patients' calls are for non-nursing desires, such as adjusting a blind, closing a door, or informing the patient of the time of day. This all sounds so trivial, but it does take time—and is so necessary for the patients' peace of mind.

In using aids we are working for the comfort and recovery of our patients. Our professional staff are relieved of non-nursing duties; our hospital gains prestige. I am convinced that the subsidiary worker is a *necessary cog*.

"In the school of nursing's vast wheel
That daily makes the same old trip,
But what a joy for the Aid to feel
That but for her that cog might slip.
'Tis something, after all, to jog
Along and be a first class cog."

Shortage of Doctors in Germany

A serious shortage of doctors is a trouble which the Nazis have directly brought upon themselves by their deliberate neglect of education. "A lack of panel doctors has resulted in patients having to lose long hours in waiting", states the Reich Ministry of Labour. "This loss of working time is particularly unjustifiable in the case of insured workers of the war industry." Factory doctors are not being popular with the workers. "Women workers are convinced that the factory doctors in every case take the part of the employers, and report workers fit for work in the latters' interests".—(Munchener Neueste Nachrichten)

Phantom Pirates

Claire Harris MacIntosh

In the guise of gaunt, grey, gulls,
Where the water, seething, mulls,
And men die,
We, winged wraiths of buccaneers,
Hurl defiance, shriek our jeers,
As we fly.

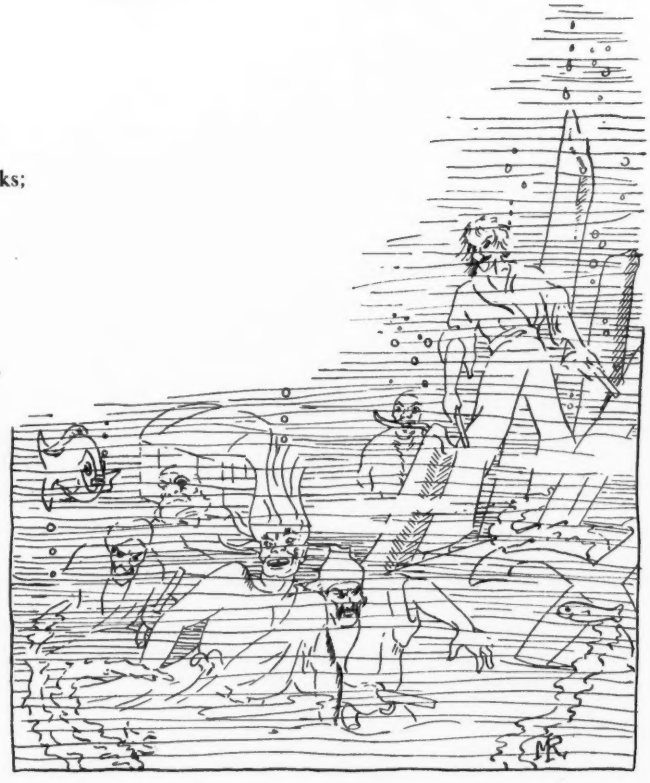
In the screams of gulls in spray,
In the Loon's loud, spectral bray,
In the mist,
We, the spirits, ever doomed
For the treasure-loot entombed,
Must exist.

We forgather where old wrecks
Reek with slime on worm-scarred decks;
Then we rise,—
Swirls of mist again to soar
Over men who dig on shore
For OUR prize.

Haunting, screeching, ghosts of space,
We could guide them to the place
Where we died:
Let them gloat on all our gold,
Then in death-cold mists enfold,
While the tide

Enters through a hidden door,
Scattering loot on ocean floor;
While, at night,
Thunder booms and flashes streak,
Ghoulish pirates, frenzied, shriek
At their plight.

But in screams of gulls in spray,
In the Loon's loud, spectral bray,
In the mist,
We, the spirits, ever doomed
For the treasure-loot entombed,
Must exist.



Mrs. (Dr.) Geo. A. MacIntosh, Halifax, in the *Dalhousie Review*.

PROGRESS IN MEDICAL PHOTOGRAPHY

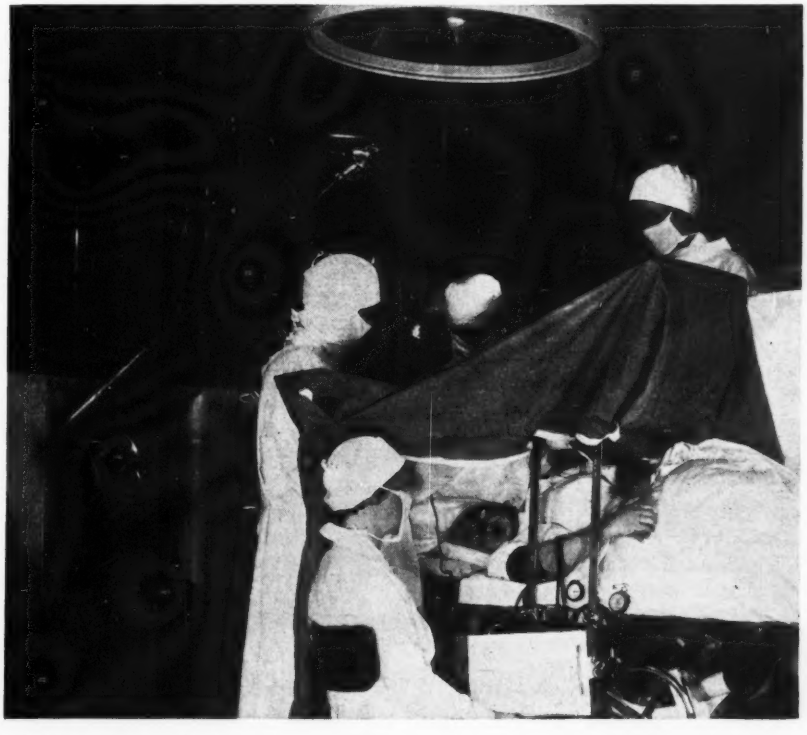
H. S. HAYDEN, F.R.P.S.
Photographic Department,
Montreal Neurological Institute

THE history of medical photography has apparently never been entirely recorded although the story of practical photography can be roughly dated back to just over one hundred years.

In the years 1830-35 an Englishman named Fox Talbot was, with other scientists of his day, including two Frenchmen, Daguerre and Niepce, making considerable progress by using the camera obscura and by coating paper with alternate washing of silver and salt, exposing for an hour or two while the solutions were still wet. Twenty to thirty years later the well known daguerreotype came into being and as our parents or grandparents will tell us, the customer could have this "new magic" produce a resemblance of himself on a piece of tin or glass. The fact that it was fairly permanent was the greatest step forward. It is told and re-told how family groups would pose for the photographer and the exposure time was so prolonged that movement of one in the group always seemed inevitable. As time went on, various changes in the chemical structure of these daguerreotypes made the process more practical, and it would be possible to reduce the exposure on a bright sunny day to perhaps thirty seconds.

It was 1860 before the public could obtain duplicate prints of their group photos, and, at this time, the wet collodion negative made photography possible, even to the amateur. It was then possible to go to a spot of scenic value and photograph the mountains, lakes, woodlands, and anything that could momentarily be kept at a standstill.

Up to this period of history nothing of value photographically was available to the medical man and his associates. The great need was for speedier emulsions, as well as for colour sensitive material.

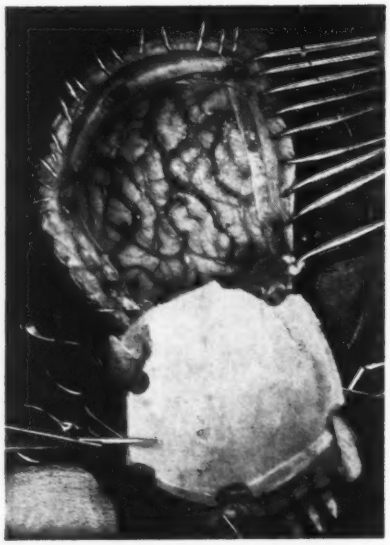


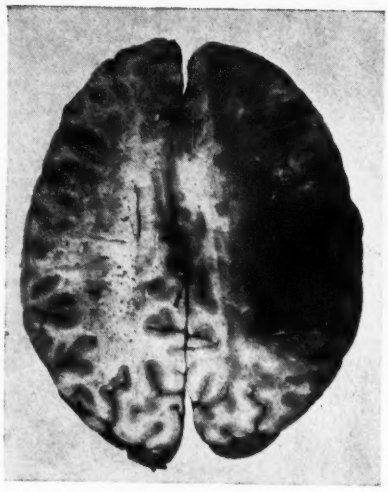
Invention and Use of Dry Plates

Although so-called dry plates were invented and produced by Wratten and Wainwright, England, in 1878, it was only after five more years that photographers would discard the wet plate and use the dry. The reason appears to be that they got down to a very reliable technique with the wet emulsion, tolerating the fairly long

Above — An early photographic camp, complete with solutions for making wet plates.

Left — Mirror photography as used in the operating room of the Montreal Neurological Institute.





Left — Photograph taken during operation on the brain at the Montreal Neurological Institute.

Right — Cross section of human brain showing metastatic sarcoma of right parietal lobe.

exposure detriment, and would overexpose the negative when trying out the new dry-plate which had a much greater speed. Common sense, I suppose, won them over, and actually from that time until to-day we have been using dry plates. The use of these so-called dry plates was introduced into the hospital x-ray departments towards the end of the nineteenth century. With the comparative difficulties of slower speeds of those x-ray glass plates, remarkable exposures were made and surgeons found a new field of investigation forming. The use of glass plates was discarded in 1912 when the Eastman Kodak Company introduced flat film for making negatives. These advantages are particularly manifest in the case of radiography, because of the fact that the film can be coated on both sides. The x-rays passing through the film produce fluorescence on the calcium tungstate intensifying screen. This again cuts down the length of exposure which would have been required with a glass plate.

The modern advancement of very high speed panchromatic emulsions (a panchromatic film is an emulsion sensitive to all colours of the spectrum, whereas the x-ray and ordinarily used films are blind to red and orange colours) has, with other photographic research attainments, made it possible to produce photographic records of clinical matter as is shown in later paragraphs.

Photography's Use to the Medical Practitioner

To-day the medical photographer with a well equipped department should be able to include in his routines photographs of patients, surgical operations, pathological and photomicrography in both monochrome and colour, also motion picture work as well as the routines of reproducing from books, x-ray films and general lantern slide requirements.

Most medical men realize the necessity these days of using good photographs to illustrate their articles and books, and the modern hospital is equipped to-day with a full-time photographer and a department that compares very favourably with others around it. From a research point of view it is the best way to record visible results. There is a saying that, "one good photograph is equal to a thousand words." Again a patient arrives at the hospital or office with a certain deformity, perhaps a rare disease; three or four months pass and we see a definite change in this patient. If we had a record of this case on admittance the comparison would be indisputable and might have the effect of "cheering up the patient," to say nothing of the doctor.

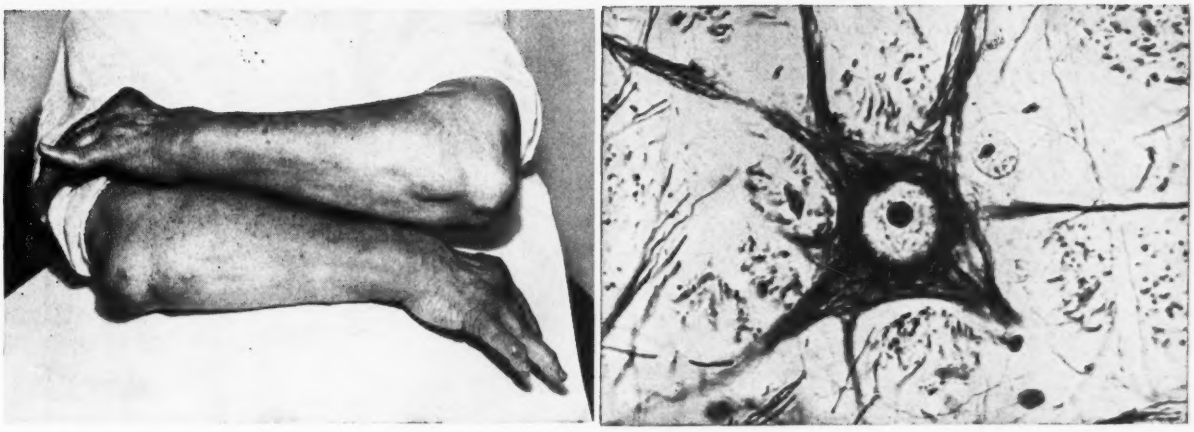
There is scarcely a lecture given to-day for which the doctor does not use either lantern slides or moving pictures. Most surgeons have coloured moving pictures of their outstanding operations, particularly if they have a special technique. Dentists, too, find it a considerable help in the treatment of their interesting cases. Included in the finest cinematography in colour the writer has seen are some hundreds of feet of film on latest techniques of fitting new dental plates.

Infra-red Photography

Recently Massopust demonstrated an infra-red photographic study of the changing pattern of the superfi-

Left—Photograph taken in ordinary way.

Right—Same patient photographed by infra red light.



Left — A case of gout, an example of photographic recording of patients. Right — Photomicrography, a motor nerve cell magnified 3,000 times.

cial veins in a case of human pregnancy. Infra-red photography is a valuable method of investigation in the diagnosis of vascular cutaneous tumors in the living body when the presence of blood is doubtful. The value of infra-red photography to medicine is comparatively new. The results so far have been interesting, but not so far of great diagnostic value.

Surgical Photography

Moving pictures of surgical operations taken on Kodachrome film, so frequently seen at meetings of a scientific nature need little comment. The technique is standardized, and results are largely dependent on good lenses, correct exposure, and illumination, daylight or photo-flood lamps used separately, but never together.

Still pictures of surgical work in the writer's opinion are very much more difficult. The difficulty is chiefly that of arresting motion, and the fact that the liquids which surround the operative exposure create objectionable highlights in the final picture. Unless telephoto lens systems are used, the image is inclined to be too small and there is the necessity of keeping the apparatus far enough away from the sterile field. Fair success with the miniature type of camera with the long focussed telephoto lens has been achieved. The chief drawbacks, are the loss of detail, definition, and the possible graininess when the small picture is enlarged to a usable size.

An idea was experimented upon in regard to surgical still pictures at the photographic department of the Montreal Neurological Institute some years ago and proved eventually to be of good value. Without stressing too much the technical details, the principles are as follows: the use of a mirror suitably placed over the operating table and a camera at a desirable point some distance away, photographically recording the image in the mirror. (see illustration.) The illumination additional to that of the operating room is given by "photo-flood lamps. Very satisfactory photographic results of brain operations have been achieved by this method and, in the author's opinion, this mirror photography could be utilized in medical photography to a much greater extent.

Photo-micrography

The progress of photo-micrography has not been comparatively so great in the last twenty years. For one thing, highly speeded films are not a necessity except under extraordinary needs, and very good results have been produced with non-colour sensitive films.

Perhaps the progress in modern lenses, dyes, and chemical stainings has been responsible for good work in photomicrography. Apart from these developments this phase of photography does not seem to have been so progressive as others.

Finally, a point of importance is the progress of reproduction in medical journals. A method that certainly cannot be called new in the printing trade is the collotype process, which is undoubtedly the best. Though it is expensive, it is suitable for smaller editions of a thousand copies or so. The exact recording of the finest detail and its depth of quality is ideal for any reproduction of scientific need. However, since the image is printed from a swollen gelatine relief it cannot be used with the machinery in the up-to-date photo-engraving methods of half-tone, photo-lithography or rotogravure. The best medical and scientific journals to be seen in the hospital and university libraries are printed by letter press or half-tone process using a fine screen 150-250 lines per inch on good coated or calendared paper.

It may be mentioned here that the medical atlas type of book is either printed by straight photography or collotype methods and can readily be detected if by close examination it is found that the picture is free of the familiar lines of different sized dots.

Dr. W. E. Gallie Receives High Honour

Dr. W. Edward Gallie, dean of the Faculty of Medicine, University of Toronto, and head of the department of surgery at the Toronto General Hospital, was elected president of the American College of Surgeons at the October meeting held in Chicago. Dr. Gallie has been a governor of the College for some years and has been intensely interested in improving the training of surgeons and the efficiency of hospitals.

National Hadassah to Make Important War Contribution

The Hadassah organization of Canada has announced a war service plan which includes erection of a hospital for British forces in the Near East, equipment of a Red Cross hospital ward in England and the purchase of several Red Cross ambulances. The Government has approved the offer to build and equip the hospital.

"FREE SERVICE"

An Interpretation of the New Statistical Returns

By PERCY WARD, Vancouver,
Chairman, Committee on Accounting and Statistics,
Canadian Hospital Council.

THE interests of voluntary hospitals will be materially advanced when accurate accounting and statistical records are available to show the extent to which hospital patients are able to meet the cost of their own hospitalization and, at the same time, the extent to which financial aid to hospitals from general tax funds is justified.

In an endeavour to obtain this information, the Committee on Accounting and Statistics, with the endorsement of the Canadian Hospital Council, has adopted the word "free" as a symbol of necessary hospital service to persons "unable to pay, and not likely to be able to pay".

Standard dictionaries contain many alternative definitions of the word "free," but none of them are sufficiently precise for the purpose for which the word has been adopted. Among other definitions is "gratuitous." Gratuitous means "not paid for." These terms are not absolute. There is nothing "free," or "gratuitous," or "not paid for" in this world. Everything upon which a monetary value can be placed is "paid for" by some one. If goods or services are not "paid for" by the consumer, they are "paid for" by the producer or some human link between the producer and the consumer, or by the public at large. Goods and services having a monetary value are never absolutely "free," therefore the word is insufficient for our purpose until adequately qualified. For hospital accounting purposes the word has been borrowed and qualified to give it a special meaning. This special meaning is complex and can, perhaps, best be conveyed through the medium of progressive discussion. Let us consider "free" service as if it were a diagnosis to be identified by a process of elimination.

At the outset we find ourselves in the midst of a field which contains all services to patients for which a charge is justified. In this field we can fence off from further consideration all those services that are directly paid for, except those paid from tax fund sources.

This is the first of a series of explanatory articles by Mr. Ward on the uniform basis of accounting and statistical return being adopted across Canada.

The next move towards our objective is to search for *responsibility* for payment of unpaid accounts. When responsibility is located, we must ascertain if the person responsible is able to pay. A service *is not* "free" if the responsible person is able to pay either now or in the future and, on the other hand, a service *is* "free" if the responsible person is not able to pay either now or in the future. Inability to pay does not include *refusal* to pay, or mere *failure* to pay, and "refusal" and "failure" must be carefully distinguished from "inability". "Inability" to pay is not properly established until we can show that the "inability" applies not only to the patient, but to any other person having a definite responsibility on behalf of the patient.

It is not easy to define responsibility. Responsibility may be either moral or legal. If moral responsibility is accepted by someone other than the public at large, and the account is paid, the service rendered is removed from the possibility of being classified as "free". On the other hand, moral responsibility is not enforceable, and must be considered to be non-existent unless accepted voluntarily.

Legal responsibility may be either general or personal. General legal responsibility may exist as a result of legislative enactments whereby a hospital is entitled to payment from a municipality or a province because of responsibility for care of indigents as a class. As one of the purposes of the word "free" is to help us to ascertain the extent of such payments from general tax funds, we may at once eliminate all further consideration of *general* legal responsibility, because hospital services "paid for" by general tax funds are always "free".

There still remain those cases where there is a personal legal responsibility. A personal legal responsibility to pay a hospital bill always rests primarily upon the person contracting to pay the bill. If no tangible contract exists, there is an implied contract with the patient, and the patient is primarily liable. A liability is unassignable in law without the consent of the creditor. In the absence of a written contract, a hospital desiring to adopt an attitude of entire disinterest in the financial problems of its patients may be within its legal rights to refuse to look beyond the patient and, without further concern for its patients and their problems, may promptly sue all those who do not pay. Such a policy, however, would be very harmful, both financially and sociologically. It would be harmful financially because many persons are entitled to look to other persons or organized groups to relieve them of the responsibility of meeting the cost of the service. The factors that enable them to look to others are usually complicated. A study of the complexities is essential if financial loss to the hospital is to be avoided.

Let us now try to clarify some of the conclusions that may be drawn

Mr. Ward, who is Inspector of Hospitals for British Columbia and who is located at 1418 Standard Bank Building, Vancouver, is desirous that readers of the Journal write him regarding any points of discussion in the above article.

from the foregoing. A hospital service can never be "free" where the patient is able to pay the hospital bill from his own resources. A hospital service can never be "free" where there is a person other than the patient who has a legal liability to the patient to relieve him of the burden of paying the hospital bill, and is able to discharge that liability. A hospital service can never be "free" where the responsible third party is a group (other than a family group) to which the patient is a contributor, such as official departments or organized groups which have a definite responsibility to members of a class or group, e.g. soldiers, sailors, persons coming under the Workmen's Compensation Board, insurance companies or group insurance plan operators, which accept responsibility to relieve members of the class or group from the expense of hospitalization; or of which the patient is a ward, e.g. Indians. Obviously, failure of such group to pay does not come within the meaning of "inability to pay now, and not likely to be able to pay without lowering the standard of living of a person (including dependants of that person) below a minimum comfort standard of living".

Our field of research for "free" service is now reduced to those cases where there is a personal legal responsibility to the hospital, and we may now give consideration to the procedure to be followed in arriving at a decision as to the ability of any given patient to pay his hospital bill. The final decision as to who is "unable to pay" must unavoidably rest with the hospital to which a particular patient is a debtor. While the collecting of hospital bills is a problem to the hospital, we must not forget that the discharge of the debt is frequently also a serious and complicated problem to the patient. Assisting patients in the financial problems that may accompany their stay in hospital should be regarded as a social service to be performed by the hospital for its patrons. If every hospital will make a disinterested study of the problems of its patrons, and will decide upon what is a reasonable minimum comfort standard of living appropriate to the area which the hospital serves, it is unlikely that there will be any substantial variation in the judgement of the different hospitals as to who is and who is not "able to pay".

The brilliantly lighted Christmas tree on the grounds of the Hospital for Incurables at Toronto is one of the finest displays in that city during Christmas week.

A patient may be able to pay only part of his hospital bill, either from his own resources or through the medium of other resources against which he has a valid claim. In such a case a service may be partly "free" only. But no part of a hospital service can rightly be classified as "free" where either the patient, or anyone against whom he has a valid claim, is able to pay in full, but does not do so for reasons other than inability to pay as defined herein.

"Free" service, at least initially, represents an unavoidable major loss of revenue to hospitals. There are other causes of loss of revenue termed "rebates," "courtesy" and "bad debts". These terms will be made the subject of a further article next month.

Saint John Hospital Superintendent Honoured

Dr. R. J. Collins, superintendent of the Saint John Tuberculosis Hospital, Saint John, N. B., was recently elected president of the Saint John Branch of the Canadian Institute of International Affairs.

Military Notes

Dr. T. E. Holland has been promoted to the rank of Lieut.-Colonel in the Canadian Army Medical Corps, C. A. S. F., and will be in command of Fort Osborne Military Hospital, Winnipeg.

Promoting New Wing at Glace Bay

Subscribers to the Glace Bay General Hospital are being asked to add five cents weekly to their subscription rates in order that the construction of a new wing to the hospital may begin. Construction was postponed because of a war slump in hospital securities.

Christmas at the Hospital for Sick Children, Toronto, is a merry and long-remembered occasion for both the young patients and the staff. The day begins early with the music of carols as the student nurses go up and down the hospital corridors in a candle-lit procession. From that moment until the half-hearted struggle with the sandman, the day is crowded with new delights. Last Christmas the beloved Tin Woodman and the Scarecrow from the Land of Oz paid a visit to the hospital. They were received with delight by all excepting the little lad shown in the bottom picture who refused to believe in their good intentions. The big thrill of the day was the arrival of Santa, who proved to be as bulky and jolly as any child could wish. Three solid young citizens of the future (middle left) took a very serious view of this business of posing for the camera man. The youngster at the top, however, was too busy keeping a firm hold of Santa's hand to notice anyone else.

New Medical Service Plan in British Columbia

A medical service plan known as the "M.S.A." plan has been made available by the Medical Services Association with headquarters at 925 Georgia St. West, Vancouver. This plan will provide family doctor care with treatment at the doctor's office, at home, or at the hospital, will provide necessary consultative service, will include surgical care, including general surgery, eye, ear, nose, and throat, orthopaedic surgery, gynaecology, urology, etc., will cover the charge of the medical anaesthetist, will cover accidents and injuries not covered by the Workmen's Compensation Act and will provide obstetrical care before, during and after birth. Necessary laboratory services, diagnostic aids including x-ray, biological and other services as ordered by the attending doctor, are covered.

Hospital care will be provided in a hospital recognized by the M.S.A. in a public ward for a period not exceeding twenty-one days for any one illness. The use of the operating room, ordinary medications and laboratory examinations are included in this hospital care.

These benefits are provided for the sum of $1.50, paid each month by the subscriber for himself and for each dependant registered by him.

Members will enroll in groups of not less than ten persons. In the case of large firms, the number enrolled must be more than 10, in large organizations 60% being required. The plan is open to employees of any age, with wages or salary amounting to $2,400 or less per annum. In the case of groups joining after January 1st, 1941, medical examination may be required. There is a $1.50 registration fee, with no additional registration fee for dependants.

Additional benefits include physiotherapy, x-ray, and radium treatment and medical consultations when necessary. Venereal diseases, drug addiction, self-inflicted injuries, alcoholism and mental disorders, *after diagnosis,* and injuries from war or riots are excluded.

The M.S.A. is a non-profit organization and has been approved by the College of Physicians and Surgeons of British Columbia.

Michigan Medical Services Operating in Close Conjunction With Michigan Hospital Services

The hospital and medical service plans in the state of Michigan are operating in close co-operation and indicate a means of solving the problem of giving the public both hospital and medical care. The two corporations work so closely together that they are sometimes referred to as the Michigan Health Services. Organized in March, 1940, on a statewide, non-profit basis by the Michigan State Medical Society, the Michigan Medical Services on October 1st, 1940, had enrolled 69,300 members from the 247,000 subscribers to the Michigan Hospital Services. The nine district or branch offices throughout the state represent both corporations and the Michigan Medical Service is housed in the quarters of the Michigan Hospital Services. The Medical Service has a board of directors of whom one-third are selected from the general public. This board in turn is selected by the Michigan Medical Service Corporation, which consists of the House of Delegates of the State Medical Society and other persons elected to membership in the corporation.

Benefits are of two classes:

(1) Surgical Service only;
(2) Medical, including surgical, service.

The *surgical* plan provides the subscriber when a bed patient in a hospital with surgical services, diagnostic X-ray services up to $15 and maternity service. The cost for this surgical service is 40 cents a month for the individual, $1.20 for the husband and wife and $2 for the entire family, up to 19 years of age. (Note the higher rate for the wife.)

The *medical* plan provides medical and surgical care with free choice of doctor for home, office and hospital visits, consultation services, x-ray, laboratory, medical anaesthesia, obstetrical service (after 12 months) and medical service necessary to diagnose tuberculosis, venereal diseases, cancer and mental conditions. After the payment of the first five dollars (to Michigan Medical Service) incurred for medical service, the subscriber is entitled to the above services to the annual extent of $325 for the individual, $550 for husband and wife, and $875 for the family. The initial five dollars for medical charges would be paid only once in a year for the whole family.

The monthly cost of this complete medical service is $2 for the individual, $3.50 for the husband and wife and $4.50 for the entire family. Doctors are being paid on a liberal scale of payment. For example, office call $2.00, home call $3.00, fracture of radius and ulna $35.00 and cholecystectomy $150.00.

Tuberculosis Unit Opened at Glace Bay

The tuberculosis unit of the Glace Bay General Hospital, Glace Bay, Nova Scotia, was officially opened on October the 15th.

Saskatchewan Government Opens Northern Hospital for Half Breeds

The official opening of the new log hospital for half breeds at Cumberland House, Saskatchewan, took place October the 15th. The project is under the provincial government which has charge of approximately 300 half breeds at the northern settlement. Prior to the opening of this hospital, many patients had to be taken nearly 100 miles by boat, dog team or plane to hospital at Le Pas, Manitoba.

Obiter Dicta

New Year, be good to England. Bid her name
Shine sunlike as of old, on all the sea;
Make strong her soul; set all her spirit free.

—*Swinburne.*

Survey of Civilian Hospital Facilities

DURING the past few weeks the Canadian Hospital Council has been conducting a survey of the facilities in civilian hospitals which would be available *in case of a national emergency.* This survey is being conducted with the approval of the federal government to which the information obtained will be of extreme importance. Survey forms have been sent to all public general hospitals of 50 beds or over, to tuberculosis sanatoria and to a selected list of other hospitals. It is quite possible that many hospitals under 50 beds could be of definite service to the government, but this survey should give some general indication of the facilities available. It is sincerely hoped that a one hundred per cent response will be obtained.

Hospitals are asked to estimate to what extent accommodation could be made available for government use *in case of emergency.* Type of service is requested as well as the number and type of bed accommodation. It is possible that certain hospital buildings not now used for bed space could be converted to that purpose, or it is possible that buildings adjacent to the hospital but not connected with it could be obtained and operated by the hospital as an annex for patients. Presuming that bed equipment be supplied by the government, hospitals are being asked how many beds could be put into this extra space.

It was deemed advisable also to ascertain the extent to which certain personnel could be spared without seriously crippling the present work of the hospital. It is understood, of course, that no hospitals are now overstaffed with staff nurses, graduate dietitians, occupational therapists or pharmacists, but it is possible that some of these individuals could be spared temporarily without too seriously affecting the civilian work if such were necessary in the national interest. It was felt, too, that it might be necessary to train an additional number of radiological and clinical laboratory technicians. Elsewhere in this issue reference is made to the new basis of approval of schools for the training of laboratory technicians, but should the war situation demand a greatly increased number of technicians in these fields, it might be necessary to temporarily provide a more simplified training in order to meet the suddenly increased demands.

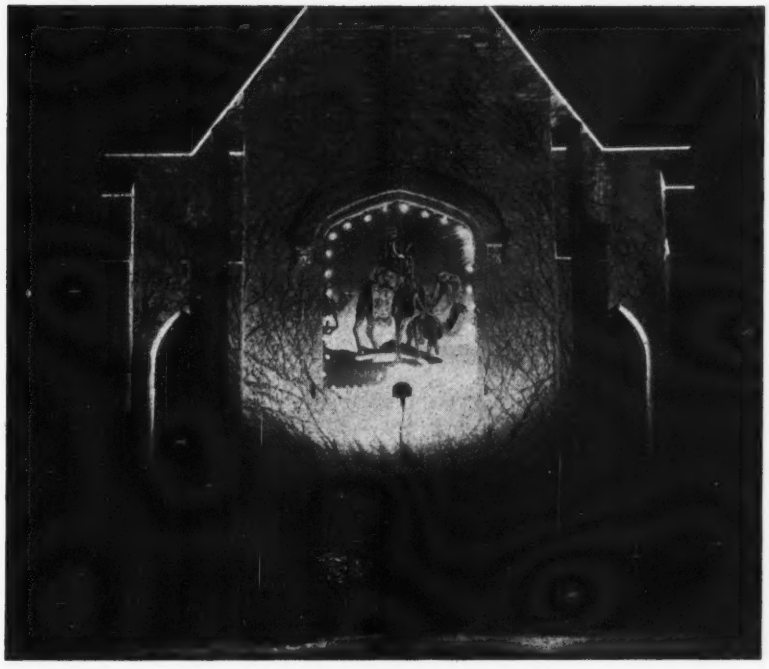
In making this survey both the Canadian Hospital Council and the federal government desire that no alarmist inference be drawn from this study. There is no reason to expect any over-whelming influx of military or civilian casualties. At the same time observations elsewhere have indicated the importance of preparedness. In a period when epochal changes are occurring with kaleidoscopic speed and when the world has become very small with dramatic suddeness, it behooves us in our national interest to do all we can to assist in any analysis of our national resources.

An Equitable Basis of Payment

RECOGNITION of the fact that hospital costs are normally higher in large hospitals than in the average small hospital is the keynote of the valuable report made by a special committee of the Manitoba Hospital Association. This report, which works out a basis for making municipal payments equitable to all hospitals is given elsewhere in this issue. The long followed principle that payments should be the same to all hospitals has never been fair to those hospitals with costly x-ray and pathological laboratories, with high priced full time experts in various professional fields, with diagnostic and therapeutic equipment far beyond that possible in small hospitals and with research departments from which all hospitals and their patients ultimately benefit. The Manitoba government has recognized this fact, but has asked the hospitals themselves to work out some basis of differentiation. The report is all the more valuable because the chairman of the committee is himself from a smaller centre.

The solution here recommended—a basic payment with compensation for "extras" on a basis of actual cost—would overcome much of the present problem. This is the basis of the new contracts with the Department of Pensions and National Health for the care of C.E.F. and C.A.S.F. patients, a basis of contract which has already proved its value.

Furthermore, it provides a suggestion for a fair basis of payment to hospitals in any province-wide group hospitalization plan. Obviously, a basis of payment fair to a hospital with a per diem cost of $3.50 to $4.00 would be a bonanza to one with costs of $2.50 or less. Much work will still have to be done in Manitoba to work out the details of evaluation for the extras rendered. Also,



"Kingës came from divers land
With great giftës in their hand
In Bethlehem the child they fand.
Stellae ducti lumine."

size alone is not sufficient, for some isolated small hospitals do have high costs. Nevertheless the report does call a spade a spade and offers a solution to the problem of financing service by the more costly metropolitan hospitals.

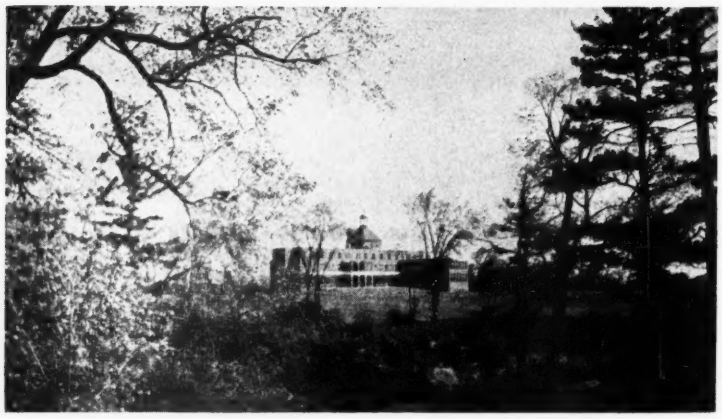
Utilizing Civilian Resources in Emergency

OUR friends to the south are indeed profiting by the experience of the belligerent nations. Their organization of governmental and health agencies into a co-ordinated and highly efficient unit illustrates the extent of this preparation for eventualities. With characteristic thoroughness they have developed an organization extending far beyond anything attempted in this country.

As one of its component parts, the strong Council of National Defence has set up a very representative Health and Medical Committee under Dr. Irvin Abell, former American Medical Association President. This Committe is "to advise the Council of National Defence regarding the health and medical aspects of National Defence and to co-ordinate health and medical activities affecting National Defence". A wide range of health activities is linked with this Committee. There are subcommittees representing medical education, industrial medicine, hospitals, dentistry, nursing and Negro health; the National Research Council with a wide range of subcommittees on special fields in medicine is closely linked in with this Committee. All of these subcommittees have outstanding authorities on their membership; for instance the Subcommittee on Hospitals has on its membership Dr. Winford Smith of Baltimore, Dr. M. T. MacEachern of Chicago, Dr. Claude W. Munger of New York, Dr. Nathaniel W. Faxon of Boston (all past-Presidents of the American Hospital Association) and Rev. Alphonse M. Schwitalla, President of the Catholic Hospital Association. Miss Mary Beard is Chairman of the Subcommittee on Nursing.

In this fashion the entire clinical and research facilities of the country are being mobilized to meet the national emergency. All sorts of problems are being undertaken: better methods of treating war wounds; wider usage of recently discovered chemicals; aviation medicine; control of venereal disease; health services in areas surrounding military camps; meeting the health problems due to the suddenly expanded industrial development; provision of medical facilities and personnel; protection of civilian health needs.

It is an ambitious and commendable programme. Here in Canada the National Medical Advisory Committee of the Canadian Medical Association and the National Research Council are rendering valuable service. Much has been done in improving nutrition for the services. Many individual organizations are helping win the war in various ways, but we have not co-ordinated these efforts to anything like the extent already accomplished in the United States. Perhaps this war hit us too suddenly; we do know that those charged with organization at Ottawa are overwhelmed with the details of their task. But this bids fair to be a long war and there is still time to warrant the closer integration and more efficient mobilization of the health resources of this country.



St. John's Convalescent Hospital Given Signal Recognition

First General Convalescent Hospital in America Approved by A. C. S.

St. John's Convalescent Hospital at Newtonbrook near Toronto was highly honoured on November 9th when Dr. Malcolm T. MacEachern of Chicago, in Toronto for the Institute on Administration and speaking at the annual meeting of the Medical Board and Medical Staff of the hospital, announced that this hospital was the first general convalescent hospital in America to be given approval by the American College of Surgeons. Several specialized convalescent hospitals have been given approval but not one for the acceptance of general patients.

Dr. MacEachern was particularly impressed by the unusual organization of the medical staff which has closely united all of the general hospitals in the Toronto area with this institution. Each hospital for acute diseases has named two or three of its staff members to serve on the convalescent staff. This group as a whole, with Dr. Valentine Stock as chief, then takes turns in overseeing the medical work of the hospital. The medical policy of the institution is directed by a Medical Board of outstanding medical consultants under the chairmanship of Dr. Alexander Primrose.

The Board of Trustees is under the chairmanship of Dr. Crawford Scadding and the actual management of the hospital is in the hands of the Sisters of St. John the Divine (Anglican) with Rev. Sister Beatrice as superintendent.

"Convalescent care is the most important single problem requiring special study at the present time" stated the speaker. "Convalescent care is very backward on this continent with only some 7,000 convalescent beds, most of them merely custodial, in contrast to approximately 1,000,000 acute beds. Montreal and Toronto have taken a most commendable lead in correcting this situation. The medical staff arrangements in this hospital form the best means of controlling the ever-present danger of permitting a convalescent hospital to become one for chronic diseases. The willingness of this hospital to take other than ambulatory patients and its excellent work in assisting orthopaedic, arthritic and cardiac patients has increased greatly its usefulness." The speaker was much impressed with the obvious cheerfulness of the patients in the hospital. In Australia, chronic, incurable and convalescent patients are utilized to a greater extent for research and teaching than is the case here. Dr. MacEachern stated that Canada might well follow the example of Australia.

The Effect of War Upon Hospital Supplies

By J. H. MANES,
Calgary, Alta.

ONE year of war has made many unforeseen changes in the hospital supply industry. Many observers believed at the outset that the pattern of events in our field would be largely that of the last war. This might have been so had Germany been our only foe, but with one country after another being invaded, we have had to change many of our preconceived ideas.

One can immediately appreciate the strain that has been placed on the industry when it is known that approximately 80 per cent of all medical, surgical and laboratory supplies, with the possible exception of pyrex glassware, x-ray and operating room equipment, had their source of origin, prior to the commencement of hostilities in countries other than Canada and the United States.

A few examples of previous outside sources of supply other than the United States are as follows:

Enamel ware — Czechoslovakia, Sweden, Britain.
Silkworm gut—Spain.
Rubber goods of all descriptions—Germany, Great Britain, Italy.
Thermometers, clinical and chemical—Great Britain, Germany.
Luer syringes—Germany, Italy, Japan.
Luer needles—Britain, France, Germany.
Suture needles—Britain.
Laboratory and scientific apparatus—Germany, Britain, Czecho-Slovakia.
Dressing and plasters—Britain.
Surgical instruments—Britain, Germany, France, Japan and Sweden.

It may be only to-morrow when we learn that Japan has fallen completely within the orbit of Hitler, so I believe it is most unwise to rely too heavily on Japan as a source of supply for any great length of time. Luer syringes of a good quality are about the chief item imported from that country. Spain comes within the same category as Japan except that our chief and probably the only surgical item imported is high grade silkworm gut.

Surgical Instruments and Appliances

It will not be long before we are relying on the United States for the majority of our needs. This will result, unfortunately, in a tremendous increase in costs, and possibly a definite scarcity, particularly of **surgical instruments.** We cannot but realize that the American manufacturers have a tremendous job on hand to take care of the demands made not only by their domestic and Canadian customers but also by Great Britain and the South American countries which previously purchased the majority of their surgical supplies from Europe.

To date, though surgical instruments are quite difficult to obtain from Britain, we are still able to procure shipments of surgical sundries. These are coming through in reasonable quantities, though they are somewhat delayed at times.

Prior to the present international situation, a large quantity of **surgical dressings** was imported from Britain. Canada has, for some time, produced an excellent quality of this class of merchandise in fairly large quantities, and our position here is not so inconvenient as it is with regard to instruments.

Laboratory Supplies

Germany and Czechoslovakia were important sources of laboratory supplies prior to the war, but the United States has been manufacturing reasonable quantities of these goods, particularly microscopes, and laboratory glassware, for some time. Should Great Britain be unable to continue regular shipments of **rubber goods,** Canadian and American manufacturers will, in all probability, be able to take care of our needs, though at a much higher cost. Surgeons' rubber gloves are an exception to this; they are being purchased by Great Britain from Canada in large quantities.

After one year of war, the surgical supply industry finds its stocks of imported items sadly depleted. This is the result of the tremendous demands made by the Department of Munitions and Supply and the Department of Pensions and National Health, and by the purchasing of emergency stocks against a possible "rainy day" by our regular hospital and physician customers.

Drugs and Chemicals

In the drug and chemical market there has been little actual shortage. Since the last war the United States has built up a fine chemical industry and it has now come forward nobly in pushing up production to fill the gap. There has not been and there is not likely to be any repetition of the exhorbitant prices of the last war on *acid acetylsalicylic, phenacetin,* etc. Certain groups such as *tartaric acid, tartrates, potassium salts,* etc., are definitely much dearer, due to limited United States production of basic raw materials.

Mercurials have perhaps advanced further than most groups . The ordinary requirements would have been more than taken care of by our own Canadian mercury mining industry, developed largely by Consolidated Smelters in British Columbia, but such a large amount of mercury is required for munitions, (making fulminate of mercury for bomb detonators, fuses, etc.) that what is released for civilian use commands a high price.

An address given at the Alberta Hospital Association Convention, 1940. Mr. Manes is B. C. and Alberta Representative of Ingram & Bell, Limited.

As for *oil, plant drugs* and their derivatives such as alkaloids, we are faced with a much more serious problem. The invasion of Norway eliminated the principal source of the world supply of **cod liver oil.** Effort is being made at the present time, with the help of the Canadian government to get production underway in Nova Scotia, but despite enthusiastic press reports it is doubtful if much can be expected from this quarter for some months yet. Some oil is coming from Newfoundland and a small amount of Norwegian oil is still in the hands of dealers. Current costs to us are now approximately three times prewar level.

In 1939 Holland sent us 36 per cent of our **codeine.** Thanks to the cooperative effort of a group of pharmaceutical manufacturers who were issued a special import permit by the Canadian government, a very large reserve was accumulated before Holland was invaded and no shortage has yet developed. Since, however, there are only two plants in Britain producing codeine, a serious situation could quickly develop. All dispensaries should carry a reserve of codeine and other narcotics. Prices have already risen sharply and could readily become acute as supplies of raw *opium* come largely from Turkey and the Balkans rather than from the Orient as most people think.

Since ninety per cent of the **cinchona bark** used comes from the Dutch East Indies, it was natural that by far the largest part of the world's supply of quinine was produced from this bark in Holland. An acute situation developed here for a time, but is now being relieved as supplies of bark are arriving in the United States and the quinine is being made there. **Theobromine** was almost a Dutch monopoly and it is very scarce and high in price at present. A new plant in the United States should come into production by February, however, and should bring about a consequent easing of prices.

A great deal of **milk sugar** comes from Holland, but a fine plant in Prince Edward County, Ontario, in the heart of an excellent dairying district, is now turning out a product of the highest quality and is not only taking care of 100 per cent of the Canadian requirements, but is actually exporting a large tonnage to Britain. Britain produced nearly all the **valerian** of good quality, and it is practically unobtainable to-day at any price. **Hyoscyamus** and **belladona** came largely from Belgium, although some small amounts were cultivated in England. The alkaloids from these plants, atropine, hyoscine, hyoscyamine, etc., are very scarce and expensive. Italy was about the sole scource of squill, which is now unobtainable at any price.

France is the home of most **floral oils,** and the perfume trade has been "hard hit." Lavender and a few oils used by the pharmaceutical industry are, of course, scarce. Perhaps the main items affected are olive oil and castile soap. We have been able to produce a soap in Canada, made according to the French formula by French workers, which is quite the equal of original French Castile. At

(*Continued on page* 48)

Successful Institute on Hospital Administration

The third annual Institute on Hospital Administration conducted by the School of Nursing at the University of Toronto was again a marked success. Guest lecturers from outside of Toronto were Dr. M. T. MacEachern of Chicago, who devoted two days to the Institute, Mr. R. Fraser Armstrong of Kingston and Mr. Gordon Friesen of Belleville.

Registrants at U. of T. Institute on Hospital Administration

Miss C. Attwood, General Hospital, Stratford, Ont.; Miss D. M. Barr, Grace Hospital, Windsor; Miss L. L. Beman, Civic Hospital, Ottawa; Miss E. Fraenkel, Brazil; Miss M. E. Gibb, Port Hope Hospital, Ontario; Mrs. C. J. Jones, Dauphin General Hospital, Manitoba; Miss O. Langstaff, Owen Sound, Ont.; Miss F. T. Latimer, Ontario Hospital, Kingston; Miss I. K. McIntosh, Junghsien, China; Miss A. M. Saxton, St. Lawrence Sanatorium, Cornwall, Ontario; Miss O. M. Wilson, General Hospital, Kingston, Ontario; Sister Alphonse, St. Theresa Hospital, Shawinigan Falls, P. Q.; Sister Louis Paul, General Hospital, Ottawa; Sister Madeleine of Jesus, St. Joseph's Hospital, Sudbury, Ont.; Sister Mary Grace, St. Joseph's Hospital, Hamilton, Ontario; Sister Vera, S.S.J.D., St. John's Convalescent Hospital, Newtonbrook, Ont.; Sister Mary Brigid, General Hospital, Sault Ste. Marie, Ont.

The group attending the University of Toronto School of Nursing Institute on Administration. Dr. Malcolm MacEachern is shown at the left and Miss Nettie Fidler of the faculty of the School of Nursing is shown at the left top.

Is there Teamwork Between Your Trustees and Your Administrator?

By S. N. WYNN, Trustee
Yorkton, Sask.

THE extent of this teamwork will depend upon the trustees and the administrator. Tact and goodwill play a major part. While some administrators welcome and appreciate helpful suggestions, others consider such as interference with their duties and prerogatives.

The desire for teamwork on the part of board members should find an outlet at board meetings and in the work of committees. The committee's decision can be conveyed to the administrator, the reasons given and the subject discussed in a frank and friendly manner.

A common mistake, often made quite innocently, is to discuss hospital matters with supervisors or other members of the staff. If the administrator is to be held responsible for the efficient management of the hospital, all matters coming within the proper jurisdiction of the Board should first be discussed with the administrator. Any orders or decisions affecting members of the staff or their duties should be issued by the administrator.

In no case should a director go directly to a staff member to discuss hospital problems.

Trustees, How Do you Score?

	Yes	*No*
1. Do you attend all Board meetings?	.....	.....
2. Do you really understand the problems of your hospital?	.....	.....
3. Do you obtain well prepared monthly reports on which to base your discussions?	.....	.....
4. Do you spend the hospital's money as you would your own?	.....	.....
5. Do you insist that the hospital have a budget and stay within it?	.....	.....
6. In selecting an administrator, do you consider his qualifications, training and experience, or try to get the cheapest service?	.....	.....
7. Do you attempt to dictate to the administrator respecting operating detail and procedure?	.....	.....
8. Do you do your share to keep your community informed of the hospital's needs and activities?	.....	.....

In our hospital there are two standing committees, Finance and House and Property. There are really two administrative departments. The hospital administrator is also superintendent of nurses and has full charge of the hospital, except for the business office. The latter is directed by the secretary-treasurer, who takes care of collections, finance and general business details. The chairman of the House and Property Committee is a liaison officer between the Board and the Administrator. This Committee deals with recommendations as to staff appointments, salaries, purchases of equipment, repairs, etc. Its recommendations are submitted to the Board as a whole.

This photograph, released by British censors, shows the terrific damage sustained by St. Thomas's Hospital during a recent air raid on London. Scores of casualties were reported and much damage inflicted.

SURGICAL RUBBER GOODS

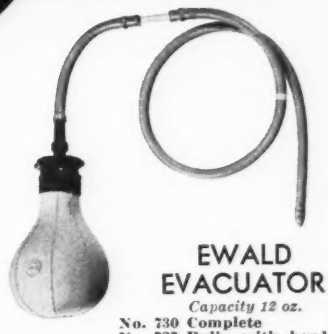
by

DAVOL

STOMACH TUBE

Open tip, one eye, 60" long, with funnel

No. 710 22 French scale, child's
No. 711 28 French scale, small
No. 712 30 French scale, medium
No. 713 32 French scale, large



EWALD EVACUATOR

Capacity 12 oz.

No. 730 Complete
No. 727 Bulb, with hard-rubber fittings
No. 728 Tubes, including glass connector

COLONIC IRRIGATOR

Closed tip, two eyes, 48" long

No. 754 36 French scale
No. 755 38 French scale
No. 756 40 French scale
No. 757 42 French scale
No. 758 44 French scale
No. 762 50 French scale

NASAL FEEDING TUBE

Open tip, with funnel

No. 753 Length 20" 16 French scale
No. 752 Length 20" 22 French scale
No. 782 Length 36" 22 French scale

RECTAL TUBE

Open tip, one eye, 20" long, funnel end

No. 724 16 French scale
No. 725 18 French scale
No. 726 20 French scale
No. 705 22 French scale
No. 748 24 French scale
No. 749 26 French scale
No. 706 28 French scale
No. 707 30 French scale
No. 708 32 French scale

COLON TUBE

Open tip, one eye, 30" long, funnel end

No. 715 22 French scale
No. 738 24 French scale
No. 739 26 French scale
No. 716 28 French scale
No. 717 30 French scale
No. 718 32 French scale

Davol Merchandise is distributed in Canada by the wholesale Surgical Supply Houses through Seiberling Rubber Co., of Canada, Ltd.

DAVOL RUBBER COMPANY, PROVIDENCE, R. I.

Approval of Schools For Laboratory Technologists

LABORATORIES in the hospitals or other institutions desiring to have official approval for the training of laboratory technologists may now make application for such approval to a committee of pathologists and biochemists set up as a committee of approval for this purpose by the Canadian Medical Association. This committee will be working in close co-operation with the Canadian Society of Laboratory Technologists, recognition of which body as an official registry for technicians (or technologists, to use the newer term) was announced in our August issue.

Up to the present the majority of technologists have received their training by being taken on the staff of a laboratory and by receiving whatever instruction be necessary to carry out the work assigned to them. In only a few institutions has there been an organized attempt to give training in other than the broad field to which the technician be delegated. As a result, we have the anomaly that while there are a large number of technologists seeking positions, hospitals have found it difficult to obtain technologists with a sufficiently broad training to do the varied work required of them in most institutions. Certain hospitals in Canada have endeavoured to meet this situation by giving properly organized courses, and those who have taken this training have proven very successful in their subsequent positions.

Canada has lagged behind the United States in this respect. In the latter country there has been recognition for some time and those laboratories wherein an adequate training can be obtained.

Basis of Approval

The following basis of approval has been evolved by a committee of outstanding pathologists in various centres across Canada under the chairmanship of Dr. William J. Deadman, pathologist to the Hamilton General Hospital. Other members of the committee are: Dr. Donald Fraser, Toronto; Dr. E. H. Mason, Montreal; Dr. James Miller, Kingston; Dr. J. J. Ower, Edmonton; Dr. J. C. Paterson, Ottawa; Dr. George Shanks, Toronto; Dr. Ralph C. Smith, Halifax; and Dr. Harvey Agnew of Toronto, Secretary.

1. Approval of schools for laboratory technologists in Canada shall be conducted by a Committee of the Canadian Medical Association appointed for this purpose and working in co-operation with the Canadian Society of Laboratory Technologists.
2. Schools may be located in adequately organized departments of pathology associated with public hospitals and in university and governmental or municipal laboratories. Hospitals, in which such laboratories are located, if general hospitals, must have a capacity of at least 200 beds, excluding bassinets, and an average daily census of 125. If the hospital be of a specialized nature, the material submitted to the laboratory must be adequate and sufficiently varied, in the opinion of the Committee, to warrant recognition of the school; the same stipulation applies with respect to governmental, municipal or university laboratories. A university affiliation by a hospital or other laboratory is recommended in order to obtain the advantage of instructional facilities in scientific subjects.
3. The director of the laboratory must be a graduate of a recognized medical school and be a clinical pathologist or biochemist of recognized standing. He shall be in daily attendance for a sufficient time to supervise properly the laboratory work and teaching.
4. The laboratory shall have a technical staff consisting of a sufficient number of registered laboratory technologists who are capable of carrying out the practical instruction of the student.
5. Responsibility for the courses of training for laboratory technologists shall rest jointly with the pathologist or biochemist in charge and with the hospital administration if the school be in a hospital. The director of the laboratory shall be responsible for the actual teaching and instruction of the student.
6. The enrolment of students at any one time shall not exceed one student to each full-time qualified member of the technical staff of the laboratory.
7. The facilities of the laboratory shall be sufficient to meet fully the requirements for adequate service to patients and for the instruction of students in the fields covered.

   Schools undertaking general instruction to students must have adequate and modern equipment in all laboratory fields. There should be adequate variety of museum and other specimens and examples.
8. Educational requirements for admission shall be honour matriculation or the equivalent grade.
9. Two types of training shall be recognized:
   A. General training, and
   B. Specialized training.

   A school may be approved for either or both types of training. The course of training for either a general certificate or one in a special field shall extend over a period of at least 12 months. (See paragraph 2.)

   (A) General training (Certificate "A") shall include training in the technique of haematology, bacteriology, medical zoology, histology, pathological chemistry and serology. The course shall consist preferably of a rotating or departmentalized service with a minimum of 300 laboratory and sufficient didactic hours in

(*Continued on page* 42)

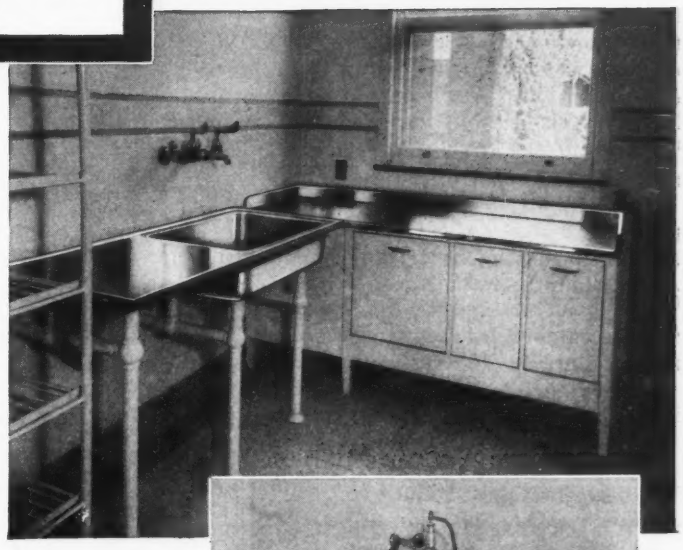
MONEL

SINKS AND STERILIZERS

specified for and installed in the new wing of

THE BRANTFORD GENERAL HOSPITAL

The new wing of the Brantford General Hospital, designed by Harold J. Smith, architect.



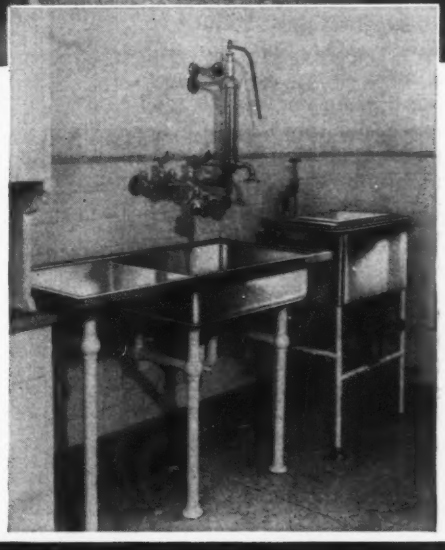
● To keep sanitary standards at the highest possible level, the Brantford General Hospital would probably have wanted "Monel" equipment regardless of cost. Fortunately "Monel" is a metal which *keeps costs down* just as effectively as it *keeps sanitary standards up.*

"Monel" makes it easy to maintain a high degree of sterility. It can never rust. It is a solid white metal with no coating to crack or chip. It is highly resistant to corrosion from most hospital solutions. And its silvery surface continues to gleam cheerily through many years of hardest service.

Because "Monel" can be kept CLEAN with ease after other materials have to be discarded, it cuts down replacement costs. "#35 Monel" is a harder sheet with a factory finish ensuring uniform appearance.

Give us the opportunity to furnish you with full information concerning "Monel" in hospital services.

"Monel" sinks in the Brantford General Hospital were manufactured by the Robert Mitchell Co. Ltd., Montreal, and installed by Anguish & Whitfield, plumbing and heating contractors.



"Monel" Sterilizers supplied by Ingram and Bell, Toronto.

THE INTERNATIONAL NICKEL COMPANY OF CANADA, LIMITED

25 KING STREET WEST, TORONTO

Here and There

AN editor never knows what he will unearth when he asks for contributions. Most Canadians are so modest that it takes a painful amount of exhortation to persuade them to undertake any kind of literary effort. Occasionally, however, one receives the most pleasant of surprises. The following note, which accompanied a recent contribution, reminds us of those Hollywood "oil well" scenes in which, after long moments of suspense, the oil comes shooting in torrents from the drill and thereby saves the day, the old homestead and the hero's neck. We've never actually discovered an oil well, but now we know what it feels like—and we've waited for a long time for this:

"If you hadnt of asked for this I wouldnt have sent it to you so thats the only reason I am sending it because I'm so modest about sending things to people unless they ask for things and then I sometimes don't have them anyway and so I cant send them because if you havent got them to send you just cant no matter if you really want to although I suppose you could get things to send only they might not be the right things and then everybody would feel bad or mad or something and it would be worse than not sending anything at all but anyway I'm sending this because you said it was about nursing or did I say that and you are interested in nursing just like my girl friend although she isnt a doctor which is a pretty swell thing to be because then you make all the people better and most people can stand being made better because that improves them such a lot and they get happier because they are better and whether you believe it or not I can write a lot longer sentence than this but in case you havent had time to draw a deep breath and feel kind of winded or lightheaded or something I'll put a period here."

* * *

Intern: "How shall I stitch the wound, doctor?"

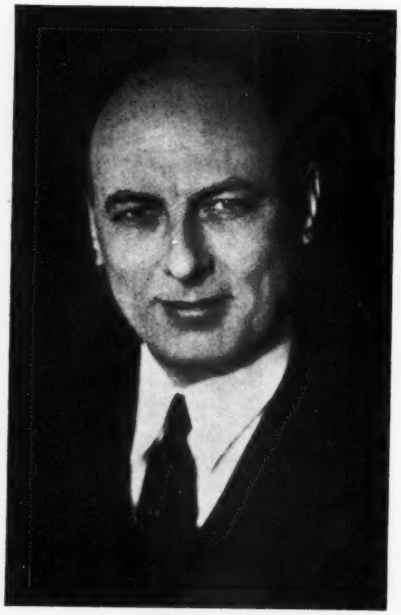
Medico: "O, suture self."

—*Hospital Topics and Buyer.*

Dr. Basil C. MacLean

The Canadian hospital field is exceedingly proud that one of its former members has been chosen President-Elect of the American Hospital Association. Dr. MacLean is one of Dr. Haywood's "boys," former assistants during Dr. Haywood's Montreal period who have taken places of outstanding leadership in the hospital field. Actually, three of Dr. Haywood's "boys" are on the American Hospital Association Board of Trustees, the other two being Dr. Don Smelzer of Philadelphia and Dr. Peter Ward of St. Paul.

Dr. MacLean, while Assistant at the Montreal General Hospital, was appointed Superintendent of the Touro Infirmary of New Orleans, and from there went to the Strong Memorial Hospital, Rochester, N. Y. Dr. MacLean is a past-president of the American College of Hospital Administrators. He has also been chairman of the Council on Administrative Practice and is chairman of the Commission on Hospital Service of the American Hospital Association.



Dr. Basil C. MacLean

Interpretation of the New Statistical Forms

Elsewhere in this issue appears the first of a series of articles by Mr. Ward on those points in the new basis of statistical return which have given rise to some variance of interpretation. It is hoped that these explanatory articles will clarify these questions and hasten uniform interpretation in the different provinces. Mr. Ward, who has done so much to bring about the adoption of a uniform basis of accounting and statistical return across Canada has expressed a desire that any hospital administrators or others having difficulty in interpreting the forms or definitions should get in touch with him at his Vancouver address.

* * *

An Unfinished Tale

It is sometimes intriguing to read a bit from the middle of a book or a magazine article and then conjecture on what preceded that extract and what would be the final ending. We would like to know what led up to—and what followed—this incident.

On a recent trip we stopped at a nice looking hotel in a small town. Returning to our room shortly after arrival we found two hefty gum chewing maids carefully checking over our baggage.

1st h.g.c. maid—"Say, youse ain't da guy dat bunked here last night are you?"

G.H.A.—"Sorry, girls, that must be another guy."

1st h.g.c. maid (to ditto no. 2)—"See, Liz, I tol' you dis gent ain't da guy you're layin' for!"

* * *

The British Spirit

And there is the story of the London "chemist" whose shop was nearly demolished by a bomb. Nothing daunted, he promptly hung out an improvised sign,

"Bismuth as Usual
During Altercations."

The Finnell 100 Series . . . . . .

FOR CLEAN, BEAUTIFUL FLOORS

WHY are there more Finnell machines sold than any other similar type of equipment? There is only one answer to that question — Finnell is the best, bar none. Long life is built into every part of the Finnell to give you value for your money — to give you complete satisfaction at less upkeep cost. There are many Finnell units, sold over fifteen years ago, still in operation and giving satisfactory results. Regardless of whether you want to scrub, wax or polish, the Finnell will do it for you — economically, at a saving in time, labour and materials. We ask you to try the other makes on your own floors, then try Finnell putting it to every possible test you can think of, then we are sure you will do as thousands of others have — buy a Finnell. Every Finnell machine is guaranteed for a period of one year against any defects, and there is a size to meet every requirement.

Check these Facts!

GREATER POWER: Short coupled wheel base gives more weight per square inch of brush surface. Sturdy, General Electric Motor, known the world over, delivers power directly.

ADDED POWER: Brush revolutions increased to 230 per minute.

INCREASED MOBILITY: A child can manage it with one hand. Wheels keep it under control. Super-off set design enables it to go under desks, benches, tables, etc.

LARGER CAPACITY: All factors combine to cover more thousand square feet per hour than any comparable machine.

MARVELLOUS SILENCE: Only two gears. Heat treated, hand polished worm gears, running in extra large grease case.

HYDRO APPROVED: Approved by the Hydro Electric Power Commission. A safety factor.

BEAUTIFULLY FINISHED: Finished in polished aluminum and chromium plate, giving it a new beauty of appearance.

DUSTBANE PRODUCTS LIMITED

OTTAWA MONTREAL TORONTO SAINT JOHN WINNIPEG VANCOUVER

Water Softening Methods and Systems

BY softening water is meant the removal of mineral salts which cause scale in boilers and pipes, increase soap consumption in laundries and cause difficulty in many textile finishing and dyeing processes. These salts are largely the sulphates and bicarbonates of calcium and magnesium and cannot be filtered out because they are in actual solution, but can only be removed by a chemical process. The systems of softening in common use are the zeolite systems and the lime - soda system.

The zeolite system, or base exchange system is based on the fact that when hard water is exposed to the zeolite (sodium aluminum silicate) the sodium of the zeolite replaces the calcium or magnesium of the hard water and these new sodium salts neither deposit as scale nor destroy soap. As the process continues the sodium of the zeolite is continuously displaced by the calcium and magnesium until it is exhausted—i.e. has no more sodium to give up. The zeolite bed is then "regenerated" by flooding with a strong solution of common salt. The zeolite then reverses its action and takes up the sodium of the salt and gives up its calcium and magnesium which is drawn off to the sewer.

A downward flow softener is "backwashed" by an upward flow before regeneration by admitting water to the bottom to loosen up the bed and carry away such sediment and dirt as may have deposited on the surface of the zeolite bed. The amount of water that can be softened by a given amount and kind of zeolite before regeneration depends upon the hardness of the water.

The zeolite process gives a completely soft water and is easy to operate. But certain waters are more corrosive after softening than when hard and may require an anti-corrosive treatment before use as boiler feed water.

Loss of softening capacity may occur but can be avoided by attention to the following points:

1. The softener should not be run beyond its rated capacity.
2. It must be backwashed at the rate and for the period recommended by the manufacturers. If not properly backwashed, contact of water with the mineral is insufficient to accomplish the softening.
3. Upward flow softeners should not be run at rates outside the prescribed range. Too high a rate will give insufficient contact and too low a rate may result in short circuits through the bed with similarly insufficient contact.
4. Turbid or hot water must not be put through the softeners.
5. Proper grade and amount of salt must be used for regeneration.
6. The mineral lost by attrition—

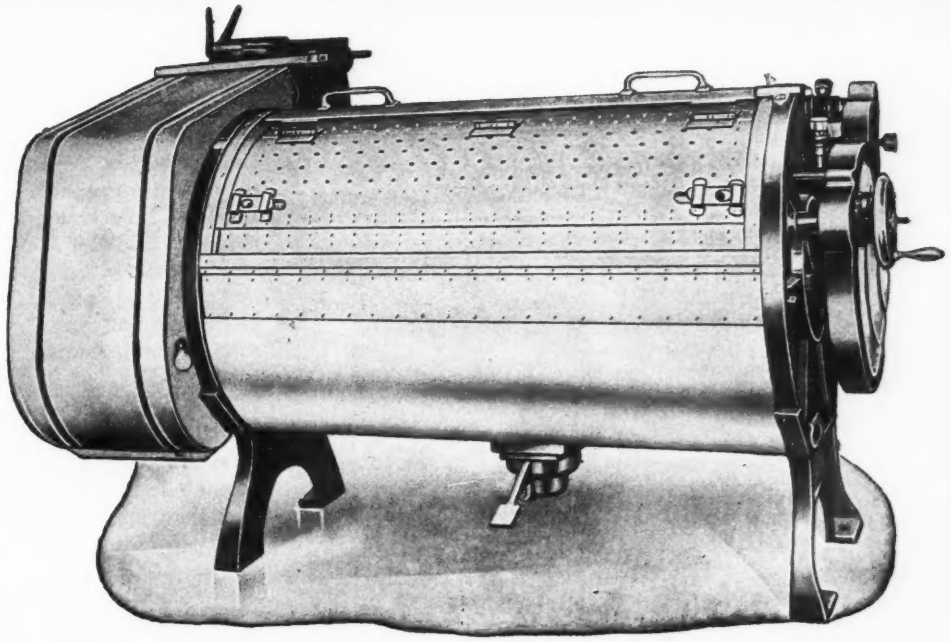
(*Continued on page* 44)

Patients Make Christmas Display at Bergen Pines

THE striking Christmas display at Bergen Pines, Bergen County Hospital, Ridgewood, N. J., has attracted thousands of visitors during the Christmas season for the past two years. The set, which shows the famous Dasher, Dancer, Prancer and Vixen pulling a sleigh loaded with gifts and their jolly old driver, was made by patients in the occupational therapy workshop of this isolation hospital and tuberculosis sanatorium. The figures, which are greater than life size, were made of bent wrought iron, shaped with welded steel wire and then covered with cement papier mache. They were water proofed and finally painted in natural colours. Wreaths and lighted candles shone from the windows of the various buildings and many of the beautiful evergreens on the grounds were brilliant with coloured lights.

The guiding spirit of the institution is Dr. Joseph R. Morrow, the medical superintendent, and it was he who designed the set and supervised its construction. Dr. Morrow is known to many Canadians who met him a year ago at the American Hospital Association convention in Toronto when he presented a beautiful bust of Florence Nightingale to the American Hospital Association.

OTTAWA WASHERS COST LESS



THE cylinders of the Ottawa Washers are made of heavy hard brass, nickel plated and polished to a beautiful bright surface. The heavy brass sheets used in the construction of the cylinder will give the equivalent in service of Monel and cost less.

The cylinder is balanced and revolves on 4-5/8 inch double ball bearing races requiring the minimum of electric power. The Ottawa washers are equipped with electric motor and all the mechanism is totally enclosed.

All gearing is machine cut for smooth, silent operation.

Also available in Monel metal.

The motor-driven extractor is faster and has greater production. It starts up immediately the electric push button is touched and attains its maximum operating speed in 15 seconds. Speed is maintained because there are no long belts to slip.

Two endless rubber V belts drive the basket shaft from the motor and no belts are exposed making it absolutely safe for the operator. Power consumption is less because the motor is only running when the extractor is actually in use.

The No. 1 Extractor with a 20" basket has a capacity of 140 pounds dry clothes each hour.
The No. 2 Extractor with a 26" basket has a capacity of 200 pounds dry clothes each hour.

Our prices are the lowest.

J. H. CONNOR & SON, LIMITED
OTTAWA, ONT.
Manufacturers of
Washers, Extractors, Dryers, Ironers.

Approval of Schools for Laboratory Technologists

(*Continued from page* 36)

each period of service to give the student a thorough grounding in the principles and technique of each subject studied. The instructions shall include:

1. Didactic instruction.
2. Practical demonstrations.
3. Text assignments and reading courses.
4. Periodic examinations.
5. Practice periods and performances of tests under supervision.
6. Development of responsibility.

(B) Special training (Certificate "B") shall be in one or more of the following: histology, serology, bacteriology, haematology or pathological chemistry. Recognition of other subjects for specialty certification shall be at the discretion of the Committee on Approval.

No canditate may qualify for more than one specialty certificate ("B") in any one year.

10. Careful records shall be maintained of the instruction given, work done by the individual student and of the standing of the student. Of importance are observations respecting the accuracy, neatness, co-operative spirit, habits, scientific interest and other personal characteristics of the student. Such records shall be readily available to the Committe on Approval.
11. Tuition fees charged shall not be exorbitant.
12. Students are expected to perform a reasonable amount of routine laboratory work.
13. The recognition of commercial laboratories is not favourably considered by the Committee. Commercial advertising is considered unethical.

Applications for Approval

Application forms for approval are now available and may be obtained by writing to the Canadian Medical Association, 184 College St., Toronto.

Another Canadian Takes Graduate Course in Hospital Administration

The one-year graduate course in hospital administration at the University of Chicago has enrolled among its nine students one Canadian. This is Dr. Margaret Dubois (nee Baker, '24) of the University of Toronto. This one-year course is a graduate course open to students holding an arts, medical, science or equivalent degree, and is conducted by the University of Chicago School of Business with the co-operation of the American College of Hospital Administrators. Following a year in residence, students take one year administrative internship in a selected hospital. Funds for the course are made available by the Commonwealth Fund of New York City, thus providing tuition at a very low cost. Dr. A. C. Bachmeyer, Director of the University of Chicago Clinics, is director of the course and Mr. Gerhard Hartman, Executive Secretary of the American College of Hospital Administrators, is associate director.

Saskatchewan Hospitals Active

One in every 10.7 persons, or 9.3% of the population, received hospital treatment in Saskatchewan, as reported by Dr. J. W. Lord, Director of Hospital Service for the province, at the Saskatchewan Hospital Association convention in October.

The total number of hospitals operating during the year was 92, an increase of 2 over the figure for 1938. Two hospitals, the Estevan General and the Dinsmore Hospitals were closed during the year. The 92 hospitals are classified according to ownership as follows:

Union	23
Community	19
Roman Catholic	17
Municipal	11
United Church	4
Presbyterian Church	1
Doctors	3
V. O. N.	1
Sanatoria	3
Red Cross	10

These hospitals provided 4,282 beds, or 4.5 beds per 1,000 population. In general hospitals, 58.5% of the beds were occupied daily, with an average stay for adults and children of 11.1 days. The average length of treatment for active tuberculosis during 1939 was 12.1 months, the same figure as for 1938. Four hospitals, Leader Town Hospital, Pierceland Red Cross Outpost Hospital, Rosthern Community Hospital and Kinistino and District Hospital received approval from the American College of Surgeons, and two hospitals, Estevan and Dinsmore, were closed.

Water Softening Methods and Systems

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up to 5% per year—must be replaced from time to time.

Lime soda softener. This system as applied to cold water is used for municipal or large industrial supplies but applied to hot water may be used for boiler feed water in large plants.

The system consists in the addition with stirring or mixing of an amount of lime and soda-ash, as determined by analysis of the water under treatment, to the water in a large settling tank. The water is allowed to stand four or more hours when most of the scale forming salts settle to the bottom and the softened water can be drawn off the upper part of the tank. This may be done by batches in separate tanks or by a single large tank with a continuous slow flow, the lime soda ash being added at the inlet and provision made for adequate agitation or mixing. After leaving the tank the softened water must be filtered. Filters gradually become clogged and useless and must be replaced but this can be avoided by addition of alum or carbon dioxide gas to settled water prior to filtration. This converts excess lime and suspended hardness back to soluble form.

Operation requires careful and frequent chemical tests of water and is therefore suitable to large supplies only.

The hot process requires but one hour if inflow is at temperature of 200 to 212 degrees F., and can be carried out in enclosed tanks.

Phosphate. The "Threshold Treatment" depends upon the addition of a few parts per million, of sodium hexametaphosphate and prevents deposition of calcium carbonate in pipe lines. Has also been used to remove excess lime remaining after lime-soda process. The phosphate is said to have no toxic properties and lime does not interfere with use of water for human consumption.

William J. Ryan, M.E., Water Service Laboratories, Inc., N.Y., Buildings and Bldg. Management, 1940 Hospital Abstract Service.

A thought for the voluntary hospital: We have no contract with philanthropy — only a gentleman's agreement.

—*E. M. Bluestone, M.D.*

Appointments and Resignations

Rev. Sister O'Grady, sister superior of St. Paul's Hospital, Saskatoon, for the past seven years, has been transferred to Edmonton. She will be in charge of the General Hospital there.

* * *

Rev. Sister Noel of St. Paul's Hospital, Saskatoon, has been appointed sister superior of the Grey Nun's Hospital at Regina.

* * *

Miss Barbara Bell has resigned as superintendent of the Oshawa General Hospital, Oshawa, Ontario.

* * *

Reverend Sister M. Patricia, superintendent of St. Joseph's Hospital, London, has been transferred to the Sacred Heart Convent, Edmonton.

Insurance Company Donates Cheque Towards Hospital Construction

The London Life Insurance Company donated a cheque for $25,000 to the city of London, Ontario, to be used toward construction costs of the new Victoria Hospital wing.

Hospital Care Plans Show Steady Growth

The November Bulletin of the Commission on Hospital Service, of which Dr. Rufus Rorem is Director, reveals an amazing growth. During the last 12-month period, 11 of the plans which had been approved by the Commission reported increases of 50,000 or more total participants.

The following is the total enrollment of a number of the leading plans:

Connecticut Plan for Hospital Care, New Haven	175,365
Plan for Hospital Care, Chicago	189,749
Associated Hospital Service of Massachusetts Boston (state-wide)	245,603
Michigan Hospital Service, Detroit (state-wide)	246,909
Minnesota Hospital Service, Association, St. Paul (state-wide)	368,840
Group Hospital Service, Inc., St. Louis	136,561
Hospital Service Plan of New Jersey, Newark (state-wide)	225,960
Hospital Service Association of Western New York, Buffalo	133,392
Associated Hospital Service of New York, New York City	1,253,322
Rochester Hospital Service Corporation	147,167
Hospital Savings Association of North Carolina, Inc., Chapel Hill	135,717
Cleveland Hospital Service Association	375,701
Associated Hospital Service of Philadelphia	251,940
Hospital Service Association of Pittsburgh	269,336

The Manitoba Hospital Service Plan operating in the Greater Winnipeg area is the only plan in Canada which has been approved by the Commission on Hospital Service of the American Hospital Association. On October the 1st, 1940 this plan reported an enrollment of 34,757.

Nursing of Prisoners

Hospital and Nursing Home Management (London) refers in its October issue to the difficulties of caring for wounded prisoners of war in civilian hospitals and states that particularly in the case of the German airman "with their unenviable reputation for brutal callousness," women should not be expected to nurse these men. It is suggested that as male nurses are not sufficiently available in normal times, it might be well to take advantage of this opportunity to develop their employment.

Construction

Work on the new 250-bed, $350,000 unit of the Alberta Mental Hospital at Oliver, British Columbia, has been started.

* * *

Construction has begun on the two 150-bed units at Westminster Hospital, London, Ontario, which is Canada's largest military hospital.

* * *

The ratepayers of the High River Municipal Hospital District have authorized the issuance of $35,000 in debentures to finance an addition to the present building. The new addition will add 60 beds to the accommodation of the hospital. Work is expected to begin next spring.

Book Review

EXPECTANT MOTHERHOOD. By Nicholson J. Eastman, M.D., Professor of Obstetrics in John Hopkins University and Obstetrician-in-Chief to the Johns Hopkins Hospital. 176 pages. Price $1.65. McClelland and Stewart Limited, Toronto. Little, Brown and Company, Boston.

Dr. Eastman's book is a splendid guide for the woman who is undergoing a normal pregnancy and provides a very complete reference book, supplementary only, however, to the advice of her own physician. The careful attention given to questions and old superstitions which may disturb the expectant mother, and the calm authoritative tone of the whole book will add a great deal to the mental comfort of the reader. Because it makes no attempt to go beyond its stated purpose, the physician will be quite safe in recommending it to his patient.

Price Trends

	Yearly Average 1939	October 1939	September 1940	October 1940
	(On basis 1926 = 100)			
Building and Construction Materials	89.7	92.8	97.9	98.2
Consumers' Goods (Wholesale)	75.9	80.1	84.1	84.2
	(On basis 1935-1939 = 100)			
Cost of Living	101.5	103.5	106.4	107.0

The Effect of War Upon Hospital Supplies

(*Continued from page* 32)

the moment I do not know of a single Canadian importer who has any *olive oil* to offer at any price. A good suggestion is to use maize oil, which is refined in Canada from Empire corn (mostly South African) and is very reasonable. *Gentian* is another plant drug largely supplied by France, which is now scarce and has risen in price.

With the shifting of the scene to the Mediterranean we may expect other supplies, *acacia, senna, myrrk, colocynth, opium,* etc., to be seriously interfered with. Materials originating in Turkey, Greece, Persia, Egypt, Irak, Arabia and even India should be watched carefully.

Should Japan take the plunge another set of products *camphor, menthol, cassia* and others, would be seriously affected. The Dutch Indies group (*quinine* and *rubber*) might jump sharply overnight. Australian *eucalyptus* might be difficult to ship.

Following the Polish conquest, *ergot* was very high in price and very scarce. Some fairly extensive production was done this year, however, under the supervision of the United States Department of Agriculture. This is just coming on the market and it is anticipated that the price will be stabilized at a much more reasonable figure.

New explosives have eased the war time demand on *glycerine,* with the result that prices remain practically unchanged and supplies are ample.

One year of almost complete disorganization of regular world-wide trade practices has left our Canadian surgical supply industry with no apologies to offer. In spite of army requirements, the additional supplies needed by the Red Cross Society and the many handicaps of war, we can say, that to the best of our knowledge, no demand on our trade by the profession has gone unfilled. How long we shall be able to boast of such an accomplishment is entirely in the "lap of the gods" and British arms. We are particularly proud also of the fact that, as far as we know, no member of our trade has been even remotely guilty of profiteering during the last twelve months of national danger and heroic endeavour.